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May 10, 2004, 11:55:42; Search time 5327 Seconds (without alignments) 10740.155 Million cell updates/sec
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1 AGTATTGTTTGTTTGC......CCAGCATTCCTGGCTTTCTG 1320
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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SUMMARIES

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Bard, J.A., Walker, M.W., Branchek, T. and Weinshank, R.L.
DNA encoding a human neuropeptide Y/peptide Y/pancreatic
polypeptide receptor (Y4) and uses thereof
Patent: US 5976814-A 1 02-NOV-1999; ô Length 1320; linear Indels 100.0%; Score 1320; DB 6; 100.0%; Pred. No. 2.7e-227; ive 0; Mismatches 0; DNA 1. .1320 /organism="unknown" /mol_type="unassigned DNA" AR083195 1320 bp Sequence 1 from patent US 5976814. AR083195.1 GI:10009985

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In (bases 1 to 1320)

Bard J.A., Walker,M.W., Branchek,T. and Weinshank,B.L.

DNA encoding a human neuropeptide Y/peptide Y/pancreatic

polypeptide receptor (Y4) and uses thereof

Patent: US 5516553-A 1 14-MAY-1996;

Location/Qualifiers .. 0 1320; Length Indels ACCATCTACACCACCTTCCTGCTCCTCTTCCAGTACTGCCT Query Match 100.0%; Score 1320; DB 6; Best Local Similarity 100.0%; Pred. No. 2.7e-227; Matches 1320; Conservative 0; Mismatches 0; 721 721 781 성 음

Chromosome 10, constructed by the Sanger Centre Chromosome 10 Mapping Group. Further information can be found at http://www.anger.ac.uk/HGP/Chr10 RR11-314P12 is from the library RPCI-11.2 constructed by the group of Pieter de Jong. For further details see http://www.chori.org/bacpac/home.htm VBCTOR: pBACe3.6 IMPORTANT This sequence is not the entire insert of clone RP11-314P12 It may be shorter because we sequence overlapping sections only once, except for a 100 base overlap. The true left end of clone RP11-144G6 is at 73032 in this sequence The true left end of clone RP11-144G6 is at 73032 in this sequence ATURES Anotation/Qualifiers Location/Qualifiers Location/Qualifiers Anotation-WP11-314P12" Anol.type="genomic DNA" Abo.xref=traxon:9606" Aclone="RP11-314P12" Aclone=	
	1261 CACTTRACTRAGTCGCACACTCCAAGCTGGGTGGCACCCCAGCATTCCTGGTTTCTCTG 1261 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGTGGCACCCCAGCATTCCTGGCTTTCTG 1261 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGGTGGCACCCCAGCATTCCTGGCTTTCTG 1262 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGTGGCACCCCAGCATTCCTGGCTTTCTG 1263 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGGTGGCACCCCAGCATTCCTGGCTTTCTG 1262 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGGTGGCACCCCAGCATTCCTGGCTTTCTG 1263 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGGTGGCACCCCAGCATTCCTGGCTTTCTG 1263 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGGGGCACCCCAGCATTCCTGGCTTTCTG 1264 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGGGGCACCCCAGCATTCCTGGCTTTCTG 1265 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGGGGCACCCCAGCATTCCTGGCTTTCTG 1265 CACTTAGCTAAGTGGGCACCACTGCAAGCTGGGGGCACCCCAGCATTCCTGGCTTTCTG 1266 CACTTAGCTAAGTGGGCACCTGCAAGCTGGGGGCACCCCAGCATTCCTGGCTTTCTGGGCTCCCAGCATTCCTGGGCTTTCTGGCACCCAGCATTCCTGGGCTTCTCTGGCTTCTGGGCTGCACCAGCATTCCTGGGCTTCTCTGGGCTGCAGCATCCTGGCTTCTCTGGGCTTCTCTGGGCTGGCACCCCAGCATTCCTGGGCTTCTCTGGGCTGGCCAGCATCCTGGGCTTCTCTGGCTGG

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Pred. No. 1e-223;
0; Mismatches 5; Indels
                                                                                         DASH (Stratagene)
mol_type="genomic DNA"
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Z66526.1 GI:1107699

pancreatic polypeptide receptor; PP1 receptor.

Homo sapiens (human)

SM Homo sapiens (human)

EDVARATORA; Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 1452)

Lundell, I., Blomqvist, A.G., Berglund, M.M., Schober, D.A., Johnson, D., Statnick, M.A., Gadski, R.A., Gehlert, D.R. and Larhammar, D.

Cloning of a human receptor of the NPY receptor family with high affinity for pancreatic polypeptide and peptide YY

J. J. Biol. Chem. 270 (49), 29123-29128 (1995)
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Submitted (26-OCT-1995) Dan Larhammar, Medical Pharmacology,
Uppsala University, Uppsala, S-751 24, Sweden
Location/Qualifiers
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Query Match
Best Local Similarity 96.9
Matches 1279; Conservative
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Submitted (09-DEC-1998) Genome Therapeutics Corporation, 100 Beaver
Submitted (09-DEC-1998) Genome Therapeutics Corporation, 100 Beaver
Street, Waltham, MA 02154, USA
Note: Clone was sequenced in 1996 using Multiplex DNA Sequencing
Technology. Data may contain low quality seq uence and BAC/Cosmid
vector sequences.

* NoTE: This is a "working draft" sequence. It currently
consists of 2 contigs. Gaps between the contigs
* are represented as runs of N. The order of the pieces
* is believed to be correct as given, however the sizes
of the gaps between them are based on estimates that have
* provided by the submittor.
* This sequence will be replaced
* by the finished sequence as soon as it is available and
* the accession number will be preserved.

* The accession number will be preserved.

* 1 30092: contig of 30092 bp in length.

* 30093 $3269: contig of 23177 bp in length.
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Homo sapiens chromosome 10 clone CRI-JC2032 map 10q11.2, 2 ordered
pieces.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 53269)
                                                                                                                         CATTCATCTATGGCTTTCTCAACACCAACTTCAAGAAGGAAATCAAGGCCCTGGTGCTGA
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Sequencing of Human Chromosome 10
Unpublished
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1. .53269
/organism="Homo sapiens"
/mol_type="genomic DNA"
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AC005184.1 GI:3983513
HGG, HTGS_PHASE2; HTGS_CANCELLED
HOMO sapiens (human)
HOMO sapiens
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                                                                                                                            Score 1210; DB 2;
Pred. No. 8.7e-208;
0; Mismatches 34;
/db_xref="taxon:9606"
/chromosome="10"
/map="10q11.2"
/clone="CRI-JC2032"
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Human neuropeptide Y4 receptor protein gene, complete cds. U35232.1 GI:1063629
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1 (bases 1 to 1180)
Bard,J.A., Walker,M.W., Branchek,T.A. and Weinshank,R.L.
Cloning and functional expression of a human Y4 subtype receptor for pancreatic polypeptide, neuropeptide Y, and peptide YY
                                                                                                                                                                                                                                                                                                                                                                                                                       781 ACCTACAGCTTGCGAGCTGGGCACATGAAGCAGGTCAATGTGGTGTGGTGGTGGTGGTG
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                                                                      CTCGTCCTCGTGGCCCTGGAGAGCATCAGCTCATCATCAACCCAACAGGCTGGAAGCCC
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              AGCATCTCACAGGCCTACCTGGGGATTGTGCTCATCTGGGTCATTGCCTGTGTCTCTCC
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                                                      AIGGCCTCCACCTGCGTCAACCCATTCATCATGGCTTTCTCAACACCAACTTCAAGAAG
                                                                          ATGCCTCCACCTGTGTCAACCCATTCATCTATGGCTTTCT-AACACCCACTTCAAG-AG
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GAGATCAAGGCCCTGGTGCTGACTTGCCAGCAGGGGCCCCCCCTGGAGGAGTCGGAGCAT
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89.4%; Score 1180; DB 6; Length 1180;
Best Local Similarity 100.0%; Pred. No. 4e-202;
Matches 1180; Conservative 0; Mismatches 0; Indels 0
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1 (bases 1 to 1180)
Au-Young, J. and Seilhamer, J.J.
Composition for the detection of signaling pathway
Patent: US 6500938-A 1061 31-DEC-2002;
Location/Qualifiers
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Sequence 1061 from patent US 6500938.
AR270498
AR270498.1 GI:29701732
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/organism="unknown"
/mol_type="genomic DNA"
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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CTGCCCTTCCTGGCCAACAGCATCCTGGAGAATGTCTTCCACAAGAACCACTCCAAGGCT
                                                                                GTCTGTTATGCACGCATCTACCGGCCCTGCAGAGGCAGGGGCGCGTGTTTCACAAGGGC
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Antigenic peptides, such as for G protein-coupled receptors (GPCRs), antibodies thereto, and systems for identifying such antigenic peptides
Patent: WO 02061087-A 202 08-AUG-2002;
Lifespan Biosciences, Inc. (US)
Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 8.8e-193;
Matches 1128; Conservative 0; Mismatches 0;
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ALLALGCQSARLEBSEHHPLSIPIGHGNLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEIK
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                                                              2 (bases 1 to 1180)
Bard, J.A.
Direct Submission
Submitted (31-AUG-1995) Jonathan A. Bard, Wolecular Biology,
Synaptic Pharmaceutical Corporation, 215 College Rd., Paramus, 107652, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGTCCTGGAATCTTTTCACATCCACTATGAACACCTCTCACATCCTGCCTTGCTGCTC
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89.4%; Score 1180; DB 9; Length 1180;
Best Local Similarity 100.0%; Pred. No. 4e-202;
Matches 1180; Conservative 0; Mismatches 0; Indels 0
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96070761
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ALVLTCQQSAPIEBSSEHLPLSTVHTEVSKGSIRLEGSRSNPI"
                                                                                                         1128 bp DNA linear PRI 05-MAY-2003 pancreatic polypeptide receptor 1 (PPYR1) gene,
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                                                                                                                                                                                                                                                                                                                                   receptor
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1128)
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Matches 1123;
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ALVLTCQQSPPLEELEHLPLSTVHTEVSKVSLRLANGRSNPI"
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                    (bases 1 to 1128)
Berglund, M.M., Schober, D.A., Esterman, M.A. and Gehlert, D.R.
The Rhesus Neuropeptide Y Receptor Y4: Cloning, Dimerization and
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Direct Submission
Submitted (11-2EP-2002) Neuroscience, Eli Lilly
Corp. Center, Indianapolis, IN 46285, USA
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Pred. No. 5.6e-179;
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/mol_type="genomic DNA"
/db_xref="taxon:9544"
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Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
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Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
1 (bases 1 to 1796)
11 (bases 1 to 1796)
Sus scrofa NPY X4 gene for neuropeptide Y receptor type 4, complete cds (genomic)
Published Only in DataBase (1998)
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Direct Submission
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Submitted (21-DEC-1998) Yoshiyasu Ito, National Institute of Animal
Industry, Animal Genome Research Team; 2 Ikenodai, Kukizaki-machi,
Inashiki-gun, Ibaragi 305-0901, Japan
(B-mail:yoshiito@niai.affrc.go.jp, Tel:81-298-38-8627)
Location/Qualifiers
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86.9%; Pred. No. 1.1e-166;
iive 0; Mismatches 164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /db_xref="taxon:9823"
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FEATURES 11128 Source 1128 /organism="Sus scrofa" /mol_type="genomic DNA" /strain="bred Norwegian Landrace" /db_xref="taxon:9823" /chromosome="14" /map="14425" 11128 /note="pancreatic polypeptide receptor; G protein-coupled receptor; Andopsin superfamily"		ORIGIN Query Match Query Match Best Local Similarity 87.2%; Pred. No. 3.4e-151; Matches 983; Conservative 0; Mismatches 144; Indels 0; Gaps 0; Qy 88 ATGAACACCTCTCACCTCCTGGCCTTGCTGCCCAAATCTCCACAAGGTGAAAACAG 147 Db 1 AAAACATCTCTCACTTCCTGGGCTTGCTTCCCAAGGAGGTCAAAAAAG 60 Qy 148 AGCAAACCCTGGGCACCCCATACAACTTCTCTGAACATTGCCAGGATTCGTGGACGT 207 Qy 148 AGCAAACCCTGGGCACCCCATACAATTTCTTCTGAACATTGCCAGGATTCCTTGGAGGTCAAAACAG 60 Qy 208 ATGGTGTTCATCCTTACAACATTGAGACTGCAGGATTCCATAGACCC 120 Qy 208 ATGGTGTTCATCCTTACAACAATTGAGACTGCAGGATTCCATAGACCCT 207		
Db 840 CCTTCCTGGCCAACAGCATCTTACAGAATGTCTTTCACAAGAACCACTCCAAGGCTGTGG 899 Qy 665 AGTTCCTGGCAGATAAGGTGGTCTGTACCGAGCCACTGGCTCACCACCACCGCACA 724 Db 900 AGTTCTGGCAGATAAGGTGGTCTTTCCAGACCACTGGCTCACCACCGCACA 959 Qy 725 TCTACACCACTTCCTGCTCCTTCCAGACACTCCCACTGGGCTTCATCCTGGTCT 784	December December	QY 965 AGGCCATCCCCATCTGCCACGGGAACCTCATCTTCTTAGTGTGCCATGCTTGCCATGG 1024 Db 1200 AGGCCATCCCCATCTGCACACTCTTTTTGTGTGTGCCACTGCTGCCCCATGG 1259 QY 1025 CCTCCACCTGGGTCAACCCCATTCTCTCAACACCACTTCAACAAGGAA 1084 Db 1260 CCTCCACCTGTGTCAACCCATTAGTCTTTCTCAACACCCAACTTCAAGAAGGAG 1119 QY 1085 TCAAGGCCTGGTGACTTGCCAGCAGAGGCTTTCTCAACACCCAACTTCAAGAAGGAG 114 Db 1320 TCAAGGCCTTGGTGACTTGCCAGCAGAGGCCCCTGGAGGAGTCGAGGATCTGC 114 Db 1145 CCTCTCCAACAGTGACATACCAGAGAGCTCCCAGGGGGGGTCCCTGGAGGGTCCAACGCCCCTGTGAGGCAGGTCCAACGGCTCAACGGTCCAACAGGTCCCAACGCTCAACAGGTCCTGAGGCTCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCTGAACAGGCTCCAACAGGTCCCAACAGGTCCCTGAACAGGTCCCAACAGGTCCCTGAACAGGTCCCTGAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCTGAACAGGTCCCAACAGGTCCCAACAGGTCCCTGAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACAGGTCCCAACACAGGTCCCAACACAGGTCCCAACACAGGTCCCAACACAGAACACACAC	OY 1205 ATCCCATTTAACCAGGTCTAGGTCTTCCCCTGCCATGTCCCTTGCCAGGCTCTTCCACT 1264	AF227955 AF227955 AF227955 LOCUS LOCUS Sub scrota neuropeptide Y-family receptor Y4 gene, complete cds. ACCESSION AF227955.1 G1:7417237 AF227955.2 G1:7417237 AF27955.2 G1:7417237 AF27955.3 G1:7417237 AF27955.3 G1:7417237 AF27955.3 G1:7417237 AF27955.4 G1:7417237 AF27955.5 G1:7417237 AF27955.5 G1:7417237 AF27955.6 G1:7417237 AF27955.1 G1:7417237 AF27955.1 G1:7417237 AFFERENCE ORGANISM Ammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus. AUTHORS AUT

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207 120 267 180 327 240 387 447 360 507 420 567 480 627 540 687 600 747 099 807 720 867 771 927 831 987 891

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VVIWLIACVLSLPFIANSILENVFHKNHSKALAFLEDKVÄCKESWPLGHHRVVYTTFL
LLFQYCTPLAFILVOYLRISKRLRRQGRVLGKSSRAGOMKRIKGVLVAMYGAPAVLWL
PLHVPNSLEDWHHEAIPVCHGNLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEVKALV
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 IMDYWIFGEVLCKMSAFIQCMSVTVSILSLVLVALERHQLIINPTGWKPSVPQAYLGI
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Pred. No. 5.7e-139;
0; Mismatches 169; Indels 9;
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ilarity 84.2%;
Conservative (
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gene, complete
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Eukaryota; Metazoa; Chordata; Hystricognathi; Caviidae; Cavia.

(Dases 1 to 1119)

Eriksson, H., Berglund, M.M., Holmberg, S.K., Kahl, U., Gehlert, D.R.
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                                                                                                                                            CTGCATGTGTTCAACAGCCTGGAAGACTGGCACCATGAGGCCATCCCCATCTGCCACGG
                                                                                                                                                                                                                                          AACCTCATCTTCTTAGTGTGCCACTTGCTTGCCATGGCCTCCACCTGCGTCAACCCATTC
                                                                                                                                                                                                                                                           961 ATCTATGGCTTTCTCAACACCAACTTCAAGAAGGAGGTCAAGGCCCTTGGTGCTGACTTGC
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TTCCAGTACTGTATCCCGCTGGCCTTCATCCTGGTCTGCTACGTGCGCGTTCTACCAGCGT
                                                                     CTGCAGAGGCGCGCGCGTGTTTCACAAGGCCACCTACAGCTTGCGAGCTGGGCACATG
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2 Abarma, P. S., Holmberg, S. K., Eriksson, H., Beck-Sickinger, A.G. Grundemar, L. and Larhammar, D.
Direct Submission Larhammar, D.
Submitted (22-UNN-1998) Neuroscience, Uppsala University, Bo Uppsala SE-75124, Sweden
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCTCCAAAGGGTCTCTGAGGCTCAGTGGCTCCAACCCCATCTA 1127
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/product="pancreatic polypeptide receptor Y4"
1 . .1119
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892 AACCTCATCTTCCTGGTGTGCCACTTGCTCGCCATGGCCTCGACCTGTGTCAATCCCTTC 951
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Search completed: May 10, 2004, 22:12:57 Job time : 5337 secs

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1 AGTATTGTTTGTCTGTTTGC......CCAGCATTCCTGGCTTTCTG 1320
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Aaq94171 Neuropep	1591	58 Probe	Aak29996 Human bon	Acas6463 Human sig	Aad12802 Human neu	706 Human	87 Probe	2 Probe	Aak43019 Human bon	172 Neuro	366	127 Mouse r	Aai72369 NPY6-R ge	128	ın	Aaa62587 Rhesus Y1	Aad62456 Human neu	Aaf86517 Human oli	Aaf77580 Human neu	Aaf87977 Human neu	7	Abn84250 Human neu
SUMMARIES	ΩI	AAQ94171	AAI14591	ABA25958	AAK29996	ACA56463	AAD12802	ABZ42706	AA123787	ABA35852	AAK43019	AAQ94172	AAI72366	AAT36127	AAI72369	AAT36128	AAA62588	AAA62587	AAD62456	AAF86517	AAF77580	AAF87977	AAD14733	ABN84250
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ALIGNMENTS

RESULT 1

New nucleic acid encoding a Y4-Receptor, anti-sense mols. and ligands - useful for treating amnesia, feeding/sleeping disorders or epilepsy, etc. The sequence encodes a human neuropeptide Y/peptide YY/pancreatic polypeptide (Y4) receptor, which can be expressed from a vector adapted for expression in a bacterial, mammalian, yeast or insect cell, specifically postvv-Y4 expression in COS-7, IM(tk)- or NHH3T3 cells. The Y4 receptor can be used to screen drugs which bind to it, specifically to find ligands (agonists or antagonists) which bind to it. The ligands can be used to treat abnormalities, Y4 receptor; hp25a neuropeptide receptor; antisense oligonucleotide; Neuropeptide Y/peptide YY/pancretic polypeptide receptor (Y4). Weinshank RL; Location/Qualifiers 88. .1212 /*tag= a Bard JA, Walker MW, Branchek T, AAQ94171 standard; DNA; 1320 BP. Claim 8; Fig 1; 154pp; English. 94WO-US014436. 93US-00176412. (SYNA-) SYNAPTIC PHARM CORP. (first entry) WPI; 1995-246190/32. P-PSDB; AAR79119. 28-DEC-1994; 28-DEC-1993; therapeutic; Homo sapiens WO9517906-A1 07-DEC-1995 06-JUL-1995. AAQ94171; AAQ94171

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26-MX-2000; 2000US-0207456P.
30-UTN-2000; 2000US-00609408.
03-AUG-2000; 2000US-0033366.
21-SEP-2000; 2000US-0234687P.
21-SEP-2000; 2000US-0234687P.
04-OCT-2000; 2000GB-00324259?.
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       specifically the antagonists can be used to treat amnesia, feeding disorders, epilepsy, hypertension, sleeping disorders or pain. Antisense oligonucleotides to the DNA can be used in compositions to decrease the activity of Y4 receptor, especially in transgenic non-human mammals
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diseases of the cervix, notably cervical cancer. I for this patent did not form part of the printed obtained in electronic format directly from WIPO ftp.wipo.int/pub/published_pct_sequences
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1400 1260 1342 1320 1140 1222 The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the human TCCAATCCCATTTAACCAGGTCTAGGTCTTCTCCCTGCCATGTCCCTTGCCAGGCTCTTC AIGCCICCACCIGIGICAACCCATICATCIATGGCITICI-AACACCAACTICAAG-AG GAGATCAAGGCCCTGGTGCTGACTTGCCAGCAGCGCCCCCCTGGAGGAGTCGGAGCAT GAGAATAAGGCCCTGGTGCTGACTTGCCAG--AGAGGGCCCCCTGGAGGAGTAAGACAT creccererecaearacaraceaacrerecaaaceerecereaceeraaceeraace 1283 recarrecearraaceaggreraggrerrerecergecargreerraceaggrrrre CACITAGCTAAGTGGGACACACTGCAAGCTGGGAGCACCCCAGCATTCCTGGCTTTCTG ATGGCCTCCACCTGCGTCAACCCATTCATCTATGGCTTTCTCAACACCAACTTCAAGAAG CTGCCCCTGTCCACAGACATACGGAAGTCTCCAAAGGGTCCCTGAGGCTAAGTGGCAGG sample. Human, gene expression, heart, microarray, vascular system, probe, cardiovascular disease, hypertension, cardiac arrhythmia, congenital heart disease, ss. ü expression CATGAGGCCATCCCCATCTGCCACGGGAACCTCCATCTTAGTGTGCCCACT #4424 for gene expression analysis in human heart cell probes for analyzing gene Claim 1; SEQ ID NO 4424; 530pp; English DR; Rank

1106 1080 1164 1140

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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers
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  GIGGCCTTTGCCGTGCTCTGCCTCTGCATGTGTTCAACAGCCTGGAAGACTGGCAC
                                                                                                     Human; bone marrow expressed exon; gene expression analysis; probe; microarray; cancer; leukaemia; lymphoma; myeloma; ss.
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30-JUN-2000; 2000US-00608408.
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21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0235359F.
04-OCT-2000; 2000CB-00024263.
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probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmiss and congenital heart disease. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                 Score 1210; DB 4; Length 1
Pred. No. 8.8e-284;
0; Mismatches 34; Indels
                                                                                                                                                                                                                                 91.7%;
96.9%;
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Best Local Similarity 96.9
Matches 1279; Conservative
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The invention relates to a combination which, comprises a number of polynucleotide probes comprising a sequence selected from one of the 1490 sequences mentioned in the specification. The combination is useful as an array element in a microarray for monitoring the expression of a number of target polynucleotides. The microarray is particularly useful in the diagnosis and treatment of cancer and immunopathology and neuropathology. The microarray is useful in diagnostics and treatment regimens, drug discovery and development, toxicological and carcinogenicity studies, forensics and pharmacogenomics. The microarray is also useful for monitoring progression of diseases and for developing sophisticated profiles for the effects of currently available therapeutic drugs. The combination is also useful for purifying a subpopulation of mRNAs, cDNAs 1320 1400 1200 1342 1140 Human; probe; ss; array element; Parkinson's disease; signalling pathway population; cancer; adenocarcinoma; leukaemia; immunopathy; AIDS; asthma; neuropathy; Alzheimer's disease; microarray. 1107 Areacciccaccrerencarccarrearcrarescrirer-Aacaccaacricaad-Ad CACTTAGCTAAGTGGGCACACTGCAAGCTGGGGTGGCACCCCCAGCATTCCTGGCTTTCTG 1165 GAGAATAAGGCCCTGGTGGTTGCCAG--AGAGGGCCCCTGGAGGAGTAAGAGCAT CTGCCCCTGTCCACAGTACATACGGAAGTCTCCAAAGGGTCCCTGAGGCTAAGTGGCAGG TCCAATCCCATTTAACCAGGTCTAGGTCTTCTCCCTGCCATGTCCCTTGCCAGGCTCTTC ATGGCCTCCACCTGCGTCAACCCATTCATCTATGGCTTTCTCAACACCAACTTCAAGAAG GAGATCAAGGCCCTGGTGCTGACTTGCCAGCAGCGCCCCCCTGGAGGAGTCGGAGCAT ď in Combination of polynucleotide probes, useful as array elements microarray for monitoring the expression of a number of target Human signalling pathway polynucleotide probe SEQ ID NO

1020

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The present invention relates to a method for treatment or prevention of bone diseases characterised by loss of bone mass, comprises administering to a mammal a compound that lowers the level of neuropeptide Y (NPY) in the serum or cerebrospinal fluid (CSF) or a compound that lowers the
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                                                       Human; neuropeptide Y; NPY; bone disease; bone mass; gene therapy; cerebrospinal fluid; CSF; inositol phosphate; IP; Paget's disease; fracture; extracellular signal-regulated kinase; ERK; osteoporosis; osteopenia; bone metastasis; neurotransmitter; osteogenic;
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and genomic fragments and in research and diagnostic applications. The array can detect changes in expression in a large number of genes coding for different signaling pathway populations which can be used to diagnose various diseases including nacer e.g. adenocarcinoma and leukaemia, immunopathites e.g. AlDS and asthma, neuropathies e.g. Alzheimer's disease and Parkinson's disease. The present sequence represents a polymucleotide form part of the invention. Note: The sequence data for this patent did not form part of the printed specification but was obtained in electronic format directly from USPTO at
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The present invention describes antigenic peptides (1) comprising: (a) any one of 1601 sequences (see ABP82019 to ABP83619) of 12-24 amino acids. Also described: (1) an assay for the detection of a particular G protein-coupled receptor (GPCR) or a candidate polypeptide in a sample; and (2) an isolated antibody having high specificity and high affinity or avoidity for a particular GPCR. (I) can be used as GPCR modulators and in gene therapy. The antigenic peptides for GPCRs are useful in detecting an antibody against a particular GPCR, and in the production of specific
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level of inositol phosphate (IP) or extracellular signal-regulated kinase (ERK). The method is specifically used to treat (including by gene therapy) or prevent osteoporosis, osteopenia or Paget's disease, but may also be used e.g., in case of fractures or bone metastases. These diseases may also be diagnosed by detecting elevated MPY levels, including monitoring of treatment, assessing efficacy of compounds in clinical trials and for identifying subjects at risk. The present sequence is a human NPY Y4 receptor DNA
    extracellular signal-regulated kinase
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                                                                                                                                             85.5%; Score 1128; DB 4; L
100.0%; Pred. No. 6.1e-264;
ive 0; Mismatches 0;
                                                                                                                                              85.58;
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1047 G protein-coupled receptor; GPCR; antigenic peptide; gene therapy; G protein-coupled receptor modulator; antibody; immune-related disease; growth-related disease; call regeneration-related disease; ancer; immunological-related cell proliferative disease; autoimmune disease; Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy; osteoporosis; ardiomyopathy; inflammation; crohn; disease; diabetes; graft versus host disease; primarion; crohn; disease; multiple sclerosis; pain; psoriasis; anxiety; depression; schizophrenia; dementia; memory loss; mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea; hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma; ulcer; gene; ds. New isolated antigenic peptides e.g., for G protein-coupled receptors (GPCR), useful for diagnosing and designing drugs for treating conditions in which GPCRs are involved, e.g. AlDS, Alzheimer's disease, cancer or 960 841 CTGCATGTGTTCAACAGCCTGGAAGACTGGCACCATGAGGCCATCCCCATGTGAGGC 900 1021 cascasasceccecercesascascarcesascarciscecercicacascaraceaa ATCTATGGCTTTCTCAACACCAACTTCAAGAAGGAGATCAAGGCCCTGGTGCTGACTTGC CAGCAGAGCGCCCCCTGGAGGAGTCGGAGCATCTGCCCCTGTCCACAGTACATACGGAA 901 AACCICATCITCITAGIGIGCCACITGCTIGCCAIGGCCTCCACCIGCGTCAACCCATIC ATCTATGGCTTTCTCAACACCCAACTTCAAGAAGGAGATCAAGGCCCTGGTGCTGACTTGC GICTCCAAAGGGTCCCTGAGGCTAAGTGGCAGGTCCAATCCCATTTAA 1215 Human neuropeptide Y receptor type 4 nucleotide SEQ ID NO:202 Disclosure; Fig 1; 523pp; English. (LIFE-) LIFESPAN BIOSCIENCES INC 19-DEC-2001; 2001WO-US050107. 19-DEC-2000; 2000US-0257144P. ABZ42706 standard; DNA; 1128 (first entry) Burmer GC, Roush CL, WPI; 2003-046718/04. autoimmune diseases. P-PSDB; ABP81859. WO200261087-A2 Homo sapiens 04-MAR-2003 1048 961 1108 1081 ABZ42706; 1168

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Claim 25; SEQ ID NO 13720; 487pp; English.
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03-AUG-2000; 2000US-00632466.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-023559P.
04-OCT-2000; 2000GB-00024263.
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antibodies. The peptides and antibodies are also useful for detecting the presence or absence of corresponding GPCRs. The antigenic peptides for treating immune-related diseases, growth-related diseases, cell regeneration-related disease, immunological-related cell proliferative diseases, or autoimmune diseases, immunological-related cell proliferative atherosclerosis, bacterial, fungal, protozoan or viral infections, atherosclerosis, bacterial, fungal, protozoan or viral infections, cetecoarthritis, osteoprorosis, cancer, cardiamyopathy, dirents nost cinflammation, allergies, Crohn's disease, diabetes, gait versus host disease, Parkinson's disease, multiple sclerosis, pain psoriasis, anxiety, depression, schizophrenia, mental retardation, memory loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension, hypotension, renal disorders, rheumatoid arthritis, trauma, ulcers, or any other disorder in which GPCRs are involved. The antibodies may be used in immunoasaays and immunodiagnosis. ABZ42523 to ABZ42869 encode GPCR proteins give in ABP81675 to ABP82018, which are used in the
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85.5%; Score 1128; DB 7; Length 1128;
Best Local Similarity 100.0%; Pred. No. 6.1e-264;
Matches 1128; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                              Sequence 1128 BP; 225 A; 364 C; 276 G; 263 T; 0 U; 0 Other;
                                                                                                                                                                                                                     the present invention
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CIGCAGAGGCAGGGGGGGGTGTTTCACAAAGGCACCTACAGCTTGGGAGCTGGGACTGGGCACATG
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The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular specifications of the human heart and vascular some e.g. cardiovascular disease, Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pot_sequences
   901 GACTGGCACCATGGCCATCCCCATCTGCCATGGGAACCTCATCTTAGTGTGGGCCAC 960
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                                                                                                                                                                                                                                                                                                                            Human, gene expression, heart, microarray, vascular system, probe, cardiovascular disease, hypertension, cardiac arrhythmia, congenital heart disease, ss.
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                                                                                                                                                                                                                                                                                             for gene expression analysis in human heart
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Pred. No. 5.3e-223;
0; Mismatches 20;
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                                                           TIGCTIGCCATGGCCTCCACCTG 1034
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26-MX-2000; 2000US-0201456P.
30-UIN-2000; 2000US-00608408.
03-AUG-2000; 2000US-023466P.
21-SEP-2000; 2000US-023466PP.
27-SEP-2000; 2000US-023465PP.
04-OCT-2000; 2000GB-00024263.
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98.0%;
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nes 963; Conservative
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expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at flow.int/pub/published_pct_sequences
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                                                                                                                                           Score 959.4; DB 4; Length 983;
Pred. No. 5.3e-223;
0; Mismatches 20; Indels 0
                                                                                                            Sequence 983 BP; 188 A; 300 C; 239 G; 242 T; 0 U; 14 Other;
                                                                                                                                              72.7%;
98.0%;
                                                                                                                                                                                   tches 963; Conservative
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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is one of the probes of the invention
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Human; bone marrow expressed exon; gene expression analysis; probe; microarray; cancer; leukaemia; lymphoma; myeloma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 4; SEQ ID NO 17576; 658pp + Sequence Listing; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 72.7%; Score 959.4; DB 4; Sect Local Similarity 98.0%; Pred. No. 5.3e-223; Matches 963; Conservative 0; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  n genome-derived single exon nucleic acid expression in human bone marrow.
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30-UUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632466.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-023559P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                        (MOLE-) MOLECULAR DYNAMICS INC
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The sequence encodes a rat neuropeptide Y/peptide YY/pancreatic polypeptide (Y4) receptor, which can be expressed from a vector adapted for expression in a bacterial, mammalian, yeat or insect cell. for expression in cost specifically pcEXV-Y4 (ATCC 75611) and pcEXV-Y4 expression in COS-7, IM(tk) or NIH3T3 cells. The Y4 receptor can be used to screen drugs which bind to it, specifically to find ligands (agonists or antagonists) which bind to it. The ligands can be used to treat abnormalities, specifically the antagonists can be used to treat amnesia, feeding disorders, epilepsy, Mypertension, sleeping disorders or pain. Antisense oligonucleotides to the DNA can be used in compositions to decrease the activity of Y4 receptor, especially in transgenic non-human mammals
New nucleic acid encoding a Y4-Receptor, anti-sense mols. and ligands - useful for treating amnesia, feeding/sleeping disorders or epilepsy, etc.
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/note= "Deleted in targeting construct"
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This sequence represents the neuropeptide Y receptor gene (NPY4-R). The targeting arms (AA172367-68) were used to disrupt this gene. The resulting sequence was used in the production of a non-human transgenic animal, preferably a mouse, with targeted G protein-coupled receptor gene disruption in the NPY4-R gene. The transgenic animal is useful for target gene, by administering an agent, and determining whether the target gene, by administering an agent, and determining whether the expression or function of the target is modulated. It is also useful for testing the efficacy of proposed genetic and pharmacological therapies for human genetic diseases, such as neurological, neuropsychological or psychotic illnesses. The transgenic mice are useful as models for pignal diseases, disorders or conditions associated with phenotypes relating to a disruption in a target, and to identify drugs, pharmaceuticals, therapies and interventions which may be effective in treating a disease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67 TGGAATCTTTTCACATCCACTATGAACACCTCTCACCTCCTGGCCTTGCTGCTCCCAAAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel non-human transgenic animal, preferably transgenic mice comprist disruptions in target G protein-coupled receptor gene, useful for identifying an agent that modulates expression or function of target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1500 BP; 320 A; 428 C; 312 G; 440 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or other phenotypic characteristics of the animal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 6; Fig 16; 93pp; English.
06-JUL-2000; 2000US-0216271P.
06-JUL-2000; 2000US-0216473P.
06-JUL-2000; 2000US-0216473P.
19-JUL-2000; 2000US-0214473P.
27-JUL-2000; 2000US-0221473P.
27-JUL-2000; 2000US-0221474P.
27-JUL-2000; 2000US-0221490P.
27-JUL-2000; 2000US-0221497P.
06-DEC-2000; 2000US-0221497P.
16-JAN-2001; 2001US-0262138P.
16-JAN-2001; 2001US-0262138P.
26-JUN-2001; 2001US-0262138P.
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Matches 1003; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             920 AGCCATACTCTTGCTACTCATAGCATATACTGTGATCCTAATCATGGGCATTTTTGGAAA 979
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                                                             Neuropeptide Y Yx receptor; NPY Yx; G-protein coupled receptor; obesity; diabetes; cardiac vasospasm; Parkinson's disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACTATGAACACCTCTCACCTCCTGGCCTTGCTGCTCCCAAAATCTCCACAAGGTGAAAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA mol. encoding neuro:peptide Y Xx receptor - useful in assays to identify cpds. which bind to receptor, useful to treat, e.g. obesity, diabetes, cardiac vasospasm and Parkinson's disease.
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                                                                                                                                                                                                                                                                                                                                                                                   Strader
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                                                                                                                                                                                                                                                                                                                                                                                     Shiao L,
                                                                                                                                                                                                                                                                                                                                                                                     Macneil DJ,
                                Mouse neuropeptide Y Yx receptor DNA.
                                                                                                                                           Location/Qualifiers
822. .1937
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95US-00415818.
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(first entry)
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Tan CP;
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P-PSDB; AAW02099.
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Weinberg DH,
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03-APR-1995;
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GPCR;
KOR3;
CRFR2;
                                                                                                                                   Gene; non-human; transgenic; mouse; G protein-coupled receptor; gene therapy; neurological disease; neuropsychological disease; psychotic illness; DEZ receptor; CB2R; adrenomedullin receptor;
                                                                                                          NPY6-R gene
AAI72369
ID AAI7
XX AC AAI7
XX IS-M
XX IS-M
XX Gene
XW Gene
XW Gene
XW Gene
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(first entry)

15-MAY-2002

AAI72369;

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RESULT 14

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corticotropin-releasing factor receptor; neuropeptide Y receptor gene; N-formylpeptide receptor-like 3; FPRL3; NPY6-R; kappa-3 opiate receptor; metabotropic glutamate receptor; mGluR8; MAS receptor; NPY4-R;
                                                                                               /*tag= a
/note= "Deleted in targeting construct"
                                                                      Location/Qualifiers
846. .1047
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06-UUL-2000; 2000US-0216259P.
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19-UUL-2000; 2000US-021473P.
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27-UUL-2000; 2000US-0221494P.
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                                                      Mus musculus
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comprising Novel non-human transgenic animal, preferably transgenic mice disruptions in target G protein-coupled receptor gene, useful identifying an agent that modulates expression or function of WPI; 2002-154854/20.

(DELT-) DELTAGEN INC.

Allen KD,

Example 7; Fig 19; 93pp; English

This sequence represents the neuropeptide Y receptor gene (NPV6-R). The reageting arms (AAI72370-71) were used to disrupt this gene. The resulting sequence was used in the production of a non-human transgenic animal, preferably a mouse, with targeted G protein-coupled receptor gene disruption in the NPV6-R gene. The transgenic animal is useful for identifying an agent that modulates the expression or function of the target gene, by administering an agent, and determining whether the expression or function of the target is modulated. It is also useful for testing the efficacy of proposed genetic and pharmacological therapies for human genetic diseases, such as neurological, neuropsychological or psychotic illnesses. The transgenic mice are useful as models for diseases, disorders or conditions associated with phenotypes relating to a disruption in a target, and to identify drugs, pharmaceuticals, the proposed genetic and interventions which may be effective in treating a disease other phenotypic characteristics of the animal

695 A; 466 C; 460 G; 659 T; 0 U; 1 Other; Sequence 2281 BP;

Query Match

DB 6; Length 2281; 21.1%; Score 278.6;

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(first entry)
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                                                            GCTGACTTGCCAGCAGAGAGCGCCCCTGGAGGAGTCGGAGCATCTGCCCCTGTCCACAGT
                                                                                                                                                                                     1158 ACATACGGAAGTCTCCAAAGGGTCCCTGAGGCTAAGTGGCAGGTCCAATTTA
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Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramarsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
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Mus musculus adult male urinary bladder cDNA, RIKEN full-length enriched library, clone:9530057L11 product:NEUROPEPTIDE Y RECEPTOR AK035505

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High-efficiency full-length cDNA cloning
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                     Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitaunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishi, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Yanjuwke, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watshiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. Sequencing legitate sequence analysis (RISA) system-384 format sequencing pipeline with 384 multicapillary sequencer
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clone lib="RIKEN full-length enriched mouse cDNA library"
dev stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
Nature 420, 563-573 (2002)
6 (bases I to 3628)
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                                                                                                                                                                                                                                                                                                                                                                                              Punctional annotation of a full-length mouse cDNA collection Nature 409, 685-690 (2001)
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IYPE 4 (SWISSPROT|O61041, evidence: FASTY, 99.2%ID,
100%length, match=1125)
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Please visit our web site for further details.
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db_xref="taxon:10090"

clone="9530057L11"
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URL:http://fantom.gsc.riken.go.jp/
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mol_type="mRNA"
strain="C57BL/65"
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(bases 1 to 426)

Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Gagi, M.A., da Silva, W.J., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deoliveira, P.S., Bucher, P., Jongeneel, C.V., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and Singson, A.J.
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Fax: +55-11-2707001

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This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/cripts/gethtml2.pl?tl=&t2=MR2-CN0038-240 200-204-g04&t3=2000-02-48(4-1)

Seq primer: puc 18 forward
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
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/mol_Lype="mmm"orproms.
/mol_Lype="mmm"orproms.
/db xref="taxon:9606"
/db xref="taxon:9606"
/dcome lib="Adult"
/clone lib="Crogan: colon normal; Vector: puc18; Site 1: Smal;
Site 2: Smal; A minl-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Dudwig Institute for Cancer Research)
profiles into the pUC18 vector. Reverse transcription of
tissue mRNA and CDNA amplification were performed under
low stringency conditions.
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Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
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BP256021A10G12 Soares normalized bovine placenta Bos taurus cDNA
clone BP250021A10G12 5', mRNA sequence.
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Unpublished (2000)
Contact: Lewin, H. A.
W. M. Keck Center for Comparative and Functional Genomics
University of Illinois at Urbana-Champaign
340 Edward R. Madigan Laboratory, 1201 W. Gregory Dr., Urbana,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            529 GGCTGGAAGCCCAGCATCTCACAGGCCTACCTGGGGATTGTGCTCATCTGGGTCAȚŢGCC
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Lewin,H.A., Soares,M.B., Rebeiz,M., Pardinas,J.,
                                                                                                                                                                                                                                                                                                                                                                                          Score 396.6; DB 12
Pred. No. 2.4e-73;
0; Mismatches 4;
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Tel: 217 333 5998
Fax: 217 244 5617
Email: h-lewin@uiuc.edu
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BF040649.1 GI:10757704
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                             SOURCE
ORGANISM
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Funding for cattle EST sequencing was provided by the USDA National Research Initiative, Animal Genome Resource Grant AG 99-3205-8534 to H. A. Lewin and J. E. Womack. Base Calling/Quality Scores: PHRED from Washington University Genome Center. Vector Trimmi g:
Cross match from Washington University Genome Center PHRAP suite.
This sequence is vector free and at least 200 bp in length.
PCR PRIMERS
FORWARD: TANTAGCATCACATAGGG
BACKWARD: ATTAACCTCACTAAAG
Insert Length: 602 Std Error: 0.00
Plate: BP250021A10 row: G column: 12
Seq primer: AGGGGATAACATTCACACAGGA
High quality sequence stop: 602.
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BP250008B10B9 Soares normalized bovine placenta Bos taurus cDNA clone BP250008B10E9 5', mRNA sequence, BF041396.1 GI:10758451
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone lib="Soares normalized bovine placenta" /note="Organ: placenta, Vector: pT7T3Pac, Site_1: EcoRI; Site_2: NotI; The CDNA library was contributed by the Soares aboratory and it was constructed and normalized as described by Bonaldo, M.F., Lennon, G. and Soares, M.B. (1996), Genome Research 6(9): 791-806."
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28.1%; Score 371.2; DB 10; Length
Best Local Similarity 87.5%; Pred. No. 6.7e-68;
Matches 406; Conservative 0; Mismatches 58; Indels
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                                                                                                                                                                                                                                                                                                                           'organism="Bos taurus"
                                                                                                                                                                                                                                                                                                                                                                                                               /sex="female"
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ACCESSION VERSION

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Fax: 217 333 5998
Fax: 217 244 5617
Email: h-lewindwinc.edu
Funding for cattle EST sequencing was provided by the USDA National
Research Initiative, Animal Genome Resource Grant AG 99-3205-8534
tro H. A. Lewin and J. E. Womack. Base Calling/Quality Scores: PHRED
from Washington University Genome Center. Vector Trimmi g:
Cross_match from Washington University Genome Center PHRAB suite.
This sequence is vector free and at least 200 bp in length. REPEAT
IN THE SEQUENCE Simple_repeat STRAND (+) ELEMENT (A)n LOCATION
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovoidea,
Bovidae, Bovinae, Bos.
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/clone_lbb="Soares normalized bovine placenta"
/note="Organ placenta, Vector: pf7735ac, Site 1: BcoRI,
Site 2: Not1; The cDNA library was contributed_by the
Soares laboratory and it was constructed and normalized
as described by Bonaldo, M.F., Lennon, G. and Soares,
M.B. (1996), Genome Research 6(9): 791-806. "
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Lewin,H.A., Soares,M.B., Rebeiz,M., Pardinas,J., Liu,L. and
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BACKWARD: ATAACCACTATAGG
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Seq primer: AGGGGATAACAATTATCACACAGGA
High quality sequence stop: 642.
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/db_xref="taxon:9913"
/clone="BP250008B10E9"
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Loaes 1 to 453)
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Rogai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deoliveira, P.S., Bucher, P., Jongeneel, C.V., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and Simpson, A.J.
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Fax: +55.11-2707001

Email: asimpson@ludwig.org.br

This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=CMO&t2=CMO-CT0811-200401-823-2010-420&t4=1)

Seq primer: puc 18 forward

High quality sequence start: 42

High quality sequence stop: 78.
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mRNA sequence.
                                                         372
                                                                                                                     574
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                                 313 TGTCAGTGACAGTCTCCCATCCTCTCGCTTGTCCTTGTGGCTCTGGAGAGGCATCAGCTCA
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao
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CMO-CT0811-200401-823-d10 CT0811 Homo sapiens CDNA,
BQ319790
                                                                                                                                                                                                                                                                                433 TCTGGCTCATTGCTTGCTTCCTCCCTGCCGTTCCTGGCCAAC 476
                                                                                                                                                                                                                                              575 TCTGGGTCATTGCCTGTGTCTCTCCCTGCCCTTCCTGGCCAAC 618
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Homo sapiens
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Conservative

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Matches

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Gaps 4 ;

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AW378515 406 bp mRNA linear EST 04-FEB-2000 QV4-HT0222-091199-024-f01 HT0222 Homo sapiens CDNA, mRNA sequence. AW378515
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Fax: +55-11-2707001

Fax: +55-11-2707001

This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.hrspripts/gethtml2.pl?tl=QV4&t2=QV4-HT0222-091199-024-f01&t3=1999-11-08ct4=1)

Seq primer: puc 18 forward

High quality sequence start: 10

High quality sequence stop: 405.
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HCGP http://www.ludwig.org.br/ORESTES.
The FAPESP/LICR Human Cancer Genome Project
Unpublished (1999)
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                          ATGGACTACTGGATCTTTGGAGAGACCCTCTGCAAGATGTCGGCCTTCATCCAGTGCATG
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profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
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Mus musculus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Musmalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Musi
1 (bases 1 to 1149)
Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A.,
Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,R., Murphy,B.,
Ferriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J.,
Adams,M.D. and Cargill,M.
Inferring nonneutral evolution from human-chimp-mouse orthologous
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Direct Submission
Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.
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Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

S. (kazaki, Y. Puruno, M., Kasukawa, T., Adachi, Y., Bono, H., Kondo, S.,

Nikaido, I., Osato, N., Saito, R., Suzuki, H., Yamanaka, I.,

Kyyosawa, H., Yagi, K., Tomaru, Y., Hasegawa, Y., Mogami, M.,

Schonbach, C., Gojobori, T., Baldarelli, R., Hill, D. P., Bult, C.,

Hume, D.A., Quackenbush, J., Schrimi, L.M., Kanapin, A., Matsuda, H.,

Batalov, S., Beisel, K.W., Blake, J.A., Bradt, D., Brusic, V.,

Chothia, C., Corbani, L.E., Cousins, S., Dalla, E., Dragani, T.A.,

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Gariboldi, M., Gissi, C., Godzik, A., Gough, J., Grimmond, S.,

Kavaji, H., Kawasawa, Y., Kedzierski, R.M., King, B.L., Konagaya, A.,

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Numata, K., Okido, T., Pavan, W.J., Pertea, G., Pesole, G.,

Ravasi, T., Reed, J.C., Reed, D.J., Reid, J., Simada, K.,

Sandelin, A., Schneider, C., Sample, C.A., Setou, M., Shimada, K.,

Sandelin, A., Schneider, C., Sample, C.A., Setou, M., Yang, I.,

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Hayatsu, N., Hirozane-Kishikawa, T., Takaki, K., Kawai, J., Aizawa, K.,

Shinagawa, T., Pukuda, S., Hara, A., Hashizume, M., Imotani, R.,

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Rogers, J., Bliney, B., Hara, A., Hashizume, M., Machan, J., Malayashizaki, Y.,

Analysis of the mouse transcriptome based on functional annotation

of 60,770 full-length conn.
                                                                                                                                                                                br733731 RIKEN full-length enriched, adult male gall bladder Mus
musculus cDNA clone G630073124 5', mRNA sequence.
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Laboratory for Genome Exploration Research Group, RIKEN Genomic
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-9222
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Adachi,J./genome-gsc.riken.go.jp,
Adachi,J./Aizawa,K., Akimura,T., Arakawa,T., Carninci,P.,
Pukuda,S., Hashizume,M., Hayashida,K., Hirozane,T., Hori,F.,
Fukuda,S., Kashi,Y., Itoh,M., Kagawa,I., Kowal,J., Kolima,Y.,
Kondo,S., Konno,H., Koya,S., Miyazaki,A., Murata,M., Nakamura,M.,
Nomura,K., Numazaki,R., Ohno,M., Ohsato,N., Saito,R., Sakazume,N.,
Sano,H., Sasaki,D., Sato,K., Shibata,K., Shiraki,T., Tagami,M.,
Direct Submission
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Normalization and subtraction of Cap-trapper-selected cDNAs to prepare full-length CDNA libraries for rapid discovery of new genes. Genome Res. 10 (10), 1617-1630 (2000)
1137 GCATCTGCCCCTGTCCACAGTACATACGGAAGTCTCCAAAGGGTCCCTGAGGC 1189
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                                                                                                                                                                                                                                                                                                                                                              Mus musculus (house mouse)
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AK030279 2570 bp mRNA linear HTC 18-SEP-2003 Mus musculus 11 days pregnant adult female ovary and uterus CDNA, RIKEN full-length enriched library, clone:5031404D23
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RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 1757-1771 (2000)
Computer-based methods for the mouse full-length cDNA computer-based methods for the mouse full-length cDNA nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001) cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   317
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Please visit our web site (http://genome.gsc.riken.go.jp) for
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21.8%; Score 287.6; DB 13; Length
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383. _1496
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21.1%; Score 278.6; DB 11; Length 53.2%; Pred. No. 5.1e-48; rative 0; Mismatches 554; Indels
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Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute, 1-7-22 Subhiro-cho, Tsurumi-ku, Yokohama, Harra, Allanda, Managawa 230-0045, Japan (E-mail-genome-resegor-rient, Northern, Golds, Japan (E-mail-genome-resegor-rient, Reneward (16-17-22 Subhiro-cho, Tsurumi-ku, Yokohama, Harra, John, Managawa 230-0045, Japan (E-mail-genome-resegor-rient)
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Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
Nature 420, 563-573 (2002)
6 (bases I to 2570)
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                                                                                                                                                                              Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
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product:NEUROPEPTIDE Y RECEPTOR TYPE 6, full insert sequence
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Fax:81-45-503-9216)
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Please visit our web site for further details.
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High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
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          Adams, M.D. and Cargill, M. Direct Submission Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA This sequence was made by sequencing genomic exons and ordering them based on alignment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1381 TCACCACTGTTGGTGTGACCTCAGGAAGTTATGAAATATGCCATGCCATGTCTACTAT 1440
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Homo sapiens NPYIR gene, VIRTUAL TRANSCRIPT, partial sequence,
ACGATATCAGCTGATTGTGAACCCCCGTGGCTGGAAACCCAGAGTAGCTCATGCCTATTG 840
                                                                                                                                                                                                                                                                                                      901 ccaccircaccaaridagcccrrrcaraarcrcircrccciracrdacarcracaccacca 960
                                                                                                      GGGGATTGTGCTCATCTGGGTCATTGCCTGTCCTCTCCCTGCCCTTCCTGGCCAACAG 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            801 CCGCCCCTGCAGAGGCAGGGCGCGTGTTTCACAAAGGGCACCTACAGGCTTG---CGAGC 857
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[ (bases 1 to 1155)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanembaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Shinsky, J.J., Adams, M.D. and Cargill, M.
Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1158 ACATACGGAAGTCTCCAAAGGGTCCCTGAGGCTAAGTGGCAGGTCCAATCCCATTTA 1214
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                                                                                                                                                                                                                                      CATCCTGGAGAATGTCTTCCACAAGAACCACTCCAAAGGCTCTGGAGTTCCTGGCAGATAA
                                                                                                                                                                                                                                                                                                                                                                         GGGGATCATCTTGATTTGGCTCATTTCTCTGACATTGTCTATTCCCTTATTCCTGTCCTA
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
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/tissue_type="urinary bladder"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="RIKEN full-length enriched, adult male urinary
bladder.
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                                                                                                                                                                                                                                                                                                                                                                                                               project of Genue Exploration Research Group in Riken Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. 1st strand cDNA was GAGAGAGAGAGACAGAGCTCTTTTTTTTTTTTVN 3'], cDNA was
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Pan troglodytes NPYIR gene, VIRTUAL TRANSCRIPT, partial sequence,
Genomic survey sequence.
AY413581
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  Please visit our web site (http://genome.gsc.riken.go.jp) for
further details.
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Pred. No. 4e-43;
0; Mismatches 103; Indels 0;
                                                                                                                                            'organism="Mus musculus"
                                                                                                                                                                       /mol_type="mRNA"
/db_xref="taxon:10090"
                                                                                  Location/Qualifiers
                                                                                                                                                                                                                         clone="9530057L11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 75.4%;
Matches 316; Conservative
                                                          e mouse tissues.
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Rs Arakawa, T., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hiramoto, K., Hori, F., Ishii, Y., Ito, M., Kawai, J., Konno, H., Kouda, M., Koya, S., Matsuyama, T., Miyazaki, A., Nomura, K., Ohno, M., Okazaki, Y., Saito, P., Saito, P., Sakai, R., Sano, H., Sasaki, D., Shibata, K., Saito, R., Takadashi, T., Saaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Takeda, Y., Tanaka, T., Toya, T., Muramatsu, M. and Hayashi, F., Takeda, Y., Tanaka, T., et al. 2001)

**IKEM Mouse ESTS (Arakawa, T., et al. 2001)

**Unpublished (2001) Arakawa, T., et al. 2001)

**Lordicat: Yoshihide Hayashizaki
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1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9216

Fax: 81-45-503-9216
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Konno, H., Fukunishi, Y., Shibata, K., Itoh, M., Carninci, P., Sugahaza, Y. and Hayashizaki, Y.
Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001) Kondo, S., Shinagawa, A., Saito, T., Kiyosawa, H., Yamanaka, I., Aizawa, K., Fukuda, S., Hara, A., Itoh, M., Kawai, J., Shibata, K. and
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URL:http://genome.gsc.riken.go.jp/
Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K.,
Itch,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare [ull:length cDNA libraries for rappd discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Mataniki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T.,
and Hayashizaki,Y.
864 GAATCATCAGATCATTGCTACCTGCAACCACACATCTGTTATTCCTGCTCTGCCACCTCAC 923
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Computational Analysis of Full-Length Mouse cDNAs Compared with
Human Genome Sequences. Mamm. Genome. 12, 673-677 (2001)
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ISM Mus musculus

Bukaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

I (bases 1 to 936)

Ridional Institutes of Health, Mammalian Gene Collection (MGC)

All Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: Capabs-r@mail.inh.gov

Tissue Procurement: The Capko Laboratory

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Agencourt Bioscience Corporation

Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LML at:

http://mage.llnl.gov

Plate: LLAM14041 row: f column: 11

High quality sequence stop: 582.

Location Qualifiers

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936 bp mRNA linear EST 16-OCT-2002

SABNOURT 8967758 NIH_MGC_94 Mus musculus cDNA clone IMAGE:6490858

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/tissue_type="retina"
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                                                                                                    Eukaryota. Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates; Catarrhini, Hominidae; Pan. 1 (bases 1 to 1152).

Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Reriara, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargil, M. Adams, M.D. and Cargil, M. Polution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                                                                                Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, W.D. and Cargill, M. Direct Submission Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Snckville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.

Location/Qualifiers
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/mol type="genomic DNA"
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/note="Vector: pSportl_Sfi; Site_1: SfilA; Site_2: SfilB"
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 669)
2 (bases 1 to 669)
3 (bases 1 to 669)
4 (bases 1 to 669)
5 (bases 1 to 669)
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This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome Analysis, German Canc
Research Center (DKFZ); Bmail s.wiemann@dkfz- heidelberg.de;
sequenced by DKZ (German Cancer Research Center,
Heidelberg/Germany) within the cDNA sequencing consortium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12.1%; Score 159.8; DB 13; Length 669; 54.7%; Pred. No. 3.9e-23; tive 0; Mismatches 292; Indels 9;
                                                                                                                                                        BST (Poustka,A., Albert,R., Moosmayer,P., Schupp,I.,
Wellenreuther,R., et al.)
Unpublished (2003)
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/clone="DKF2D779B1117"
/tisane_type="liver"
/dev_stage="fetal"
/lab_host="DH108"
/clone_lib="779" (synonym
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Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                /lab_host="DH10B (phage-resistant)"
/clone_lb="NIH MCC_94"
/clone_lb="NIH MCC_94"
/note="Organ: eye, Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally; oligo-dT primed.
Average insert size 3.3 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
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                                                                                                                                                                                                                                                                                      14.1%; Score 185.8; DB 13; Length 936;
larity 57.2%; Pred. No. 1.4e-28;
Conservative 0; Mismatches 277; Indels 7;
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EST.
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es 379; Conserv
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This sequence as made by sequencing genomic exons and ordering them
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Homo sapiens GPR10 gene, VIRTUAL TRANSCRIPT, partial sequence,
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
Direct Submission
                                                   TGTTTCACAA---GGGCACCTACAGCTTGCGAGCTGGGCCACATGAAGCAGGTCAATGTGG
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/db_xref="taxon:9606"
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Location/Qualifiers
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Sequence 139, App
Sequence 1062, Appli
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Sequence 1, Application US/08176412

Patent No. 551663

GENERAL INFORMATION:
APPLICANT: Bard, Jonathan A. APPLICANT: Branchek, Theresa APPLICANT: Weinshank, Theresa APPLICANT: Weinshank, Theresa APPLICANT: Weinshank, Richard I. TITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPEPTIDE TITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPEPTIDE TITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPEPTIDE TITLE OF INVENTION: Y/PEPTIDE Y/PANCREATIC POLYPEPTIDE TITLE OF INVENTION: Y/PEPTIDE Y/PANCREATIC POLYPEPTIDE TITLE OF INVENTION: Y/PEPTIDE Y/PANCRESSEE: Cooper & Dunham STREET: 30 Rockefeller Plaza CITY: New York STATE: New York

STATE: New York

STATE: New York

STATE: New York

STATE: New York

STATE: New York

STATE: New York

STATE: New York
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: BM PC compatible
COMPUTER: BM PC compatible
COMPUTER: BM PC compatible
CORRENT APPRICATION BATA:
APPLICATION NUMBER: US/08/176,412
FILING DATE:
FLING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: White John P.
REGISTATION NUMBER: 44743/JPW/TEP
TELEPHOE/DOCKET NUMBER: 44743/JPW/TEP
TELEPHOE/DOCKET NUMBER: 44743/JPW/TEP
TELEPHOE/DOCKET NUMBER: 44743/JPW/TEP
TELEPHOE/DOCKET NUMBER: 44743/JPW/TEP
TELEPHORY (212) 977-9550
TELER: 42253 COOP UI
SEQUENCE CHARACTERISTICS:
LENGTH: 1320 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                   US-09-461-436B-31

US-09-170-496D-177

US-08-776-971-103

US-08-776-971-103

US-09-170-496D-25

US-09-170-434-1051

US-09-172-35-1

US-09-789-955-1

US-09-789-955-1

US-09-789-955-1

US-09-176-971-139

US-09-16-434-1062

US-08-776-971-139

US-08-176-971-139

US-08-176-971-139

US-08-188-1

US-08-407-355A-1

US-08-687-355A-5

US-09-407-367-1

US-08-687-355A-5

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MOLECULE TYPE: DNA (genomic)
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; LOCATION:
US-08-176-412-1
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/cgn2_6/ptodata2/ina/5A_COMB.seq:*
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/cgn2_6/ptodata2/ina/6A_COMB.seq:*
/cgn2_6/ptodata2/ina/6A_COMB.seq:*
/cgn2_6/ptodata2/ina/PcTUS_COMB.seq:*
/cgn2_6/ptodata2/ina/PcTUS_COMB.seq:*
/cgn2_6/ptodata2/ina/PcTUS_COMB.seq:*
                                   GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-08-55-268A-1
US-08-495-695B-1
US-08-945-695B-1
US-08-495-695B-1
US-08-495-695B-27
US-08-495-695B-27
US-08-894-236-5
US-08-894-236-5
US-08-894-236-11
US-08-94-236-11
US-08-94-236-11
US-09-045-186-3
US-09-041A-1169
US-09-045-186-3
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                                                     GENERAL INFORMATION:
APPLICANT: Bard, Jonathan A.
APPLICANT: Bard, Jonathan A.
APPLICANT: Branchek, Theresa
APPLICANT: Branchek, Theresa
APPLICANT: Weinshank, Richard L.
TITLE OF INVENTION: DAA ENCOING A HUMAN NEUROPEPTIDE
TITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPEPTIDE
TITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPEPTIDE
TITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
NUMBER OF SEQUENCES:
ADDRESSEE: Cooper & Dunham
STREET: 1185 Avenue of the Americas
CITY: New York
STREET: New York
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Rlopy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.24

CURRENT APPLICATION NUMBER: US/08/495,695B

FILING DATE: 13-Jan-1997

CLASSIFICATION: 435

ATTORNEY/AGBNT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 44743-A-PCT-US/JPW/JHB

TELECOMMUNICATION INFORMATION:

TELEPHORE: (212) 391-0525

INFORMATION FOR SEQ ID NO: 27:

SEQUENCE CHARACTERISTICS:

LENGTH: 1439 base pairs

TYPE: nucleic acid

STRANDEDNESS: single
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Sequence 27, Application US/08495695B Patent No. 5976814
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US-08-495-695B-27
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RECEPTOR (Y4) AND USES THEREOF
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CLASSIFICATION:
ATTORNEY/AGENT INPORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 44743-A-PCT\JPW\MAT
TELECOMMUNICATION INFORMATION:
TELEFRACE: (212) 291-0525
INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHRACTERISTICS:
LENGTH: 1439 base pairs
TYPE: nucleic acid
cTRANDEDNESS: single
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                                                                                                                                                                                                                                                                      #1.25
                                                                                                                               STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
COMPUTER: PatentIn Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/14436
FILING DATE:
CLASSIFICATION:
                                                                          3: Cooper & Dunham
1185 Avenue of the Americas
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Matches 981; Conservative
TITLE OF INVENTION: Y/PI
TITLE OF INVENTION: RECI
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESSES:
ADDRESSEE: COOPER & DI
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; LOCATION: 178..1306
PCT-US94-14436-27
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    Sequence 27, Application PC/TUS9414436
GENERAL INFORMATION:
APPLICANT: Bard, Jonathan A. APPLICANT: Walker, Mary
APPLICANT: Branchek, Theresa APPLICANT: Branchek, Theresa APPLICANT: Weinshank, Richard L. TITLE OF INVENTION: DNA ENCODING A HUMAN NEUROPEPTIDE
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431 521 491 551

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131

Gaps

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COUNTRY:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

MEDIUM TYPE: Floppy disk

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPOTHER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/415,818

FLING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/383,746

FILING DATE: 03-FEB-1995

ATTORNEY AGENT INFORMATION:

NAME: Appollina, Mary A.

REGISTRATION NUMBER: 19390

TELECOMMUNICATION INFORMATION:

THEREFORM THE PROPERTY TO THE PROPERT

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Sequence 6, Sequence 7, Sequence 7, Barbican 1, Applicant Machil, Douglas J. Applicant Shiao, Lin-Lin Applicant Shiao, Lin-Lin Applicant Strader, Catherine D. Applicant Tan, Carina P. Applicant Weinberg, David H. TITLE OF INVENTION: NEUROPEPTIDE Y RECORRESPONDENCE ADDRESS:
SADDRESSEE: Mary A. Appollina
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MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO

2

ANTI-SENSE: FEATURE:

linear

2280 base pairs

LENGTH:

TYPE: nucleic acid STRANDEDNESS: double

TELEFAX: 908-594-4720 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:

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                                                                     Length 2280;
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                                                                     21.1%; Score 278.6; DB 1;
53.2%; Pred. No. 1.4e-60;
tive 0; Mismatches 554;
                                                                     Query Match
Best Local Similarity 53.23
Matches 637; Conservative
 CDS
822..1937
, NAME/KEY:
, LOCATION:
US-08-415-818-5
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3: Mary A. Appollina P.O. Box 2000, 126 E. Lincoln Ave.

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APPLICANT: Cascieri, Margaret A.
APPLICANT: Cascieri, Margaret A.
APPLICANT: Linemeyer, David L.
APPLICANT: Shiao, Lin-Lin
APPLICANT: Strader, Catherine D.
APPLICANT: Strader, Catherine D.
APPLICANT: Tan, Carina P.
APPLICANT: Weinberg, David H.
TILLE OF INVENTION: NEUROPEPTIDE Y REC
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Mary A. Annolli-
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Patent No. 5939263
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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                  Patentin Release #1.0, Version #1.30
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Pred. No. 1.4e-60;
0; Mismatches 554;
SOFTWARE: Parentin Release #1.0, Vergreby Application Data:
APPLICATION NUMBER: US/08/894,236
FILING DATE:
CLASSIFICATION TABER: US/08/894,236
FILING DATE: 03-FEB-195
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/415,818
FILING DATE: 03-APR-1995
ATCANIEY/AGENT INFORMATION:
NAME: APPOILTING MATE: 19390Y
REFERENCE/DOCKET NUMBER: 34,087
REFERENCE/DOCKET NUMBER: 19390Y
TELECHONE: 908-594-3462
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HYPOTHETICAL: NO
ANTI-SENSE: NO
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Best Local Similarity 53.2%;
Matches 637; Conservative
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SEQUENCE CHARACTERISTICS:
LENGTH: 2280 base pairs
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                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/383,746
FILING DATE: 03-FEB-1995
PRIOR APPLICATION NUMBER: 08/415,818
FILING DATE: 03-APR-1995
ATTORNEY/AGENT INFORMATION:
NAME: APPOLINA, MAY A.
REGISTRATION NUMBER: 19390Y
TELECOMMUNICATION INFORMATION:
TELEPAKE: 908-594-3462
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 2280 Dase pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: mucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
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822..1937
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PCT-US96-01444-5
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GGGGATTGTGCTCATCTGGGTCATTGCCTGTGTCTCTCCCTGCCCTTCCTGGCCAACAG 620
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                                                              .280 edddarcarcricarriddcrcarrircrcrcacarrercrarriccrrarrccrgrccra
                                                                                                                                       CATCCTGGAGAATGTCTTCCACAAGAACCACTCCAAGGCTCTGGAGTTCCTGGCAGATAA
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                                                                                                                                                                                                                                                                           GOTGOTCTGTACCGAGTCCTGGCCACTGGCTCACCGACCGACCATCTACACCACCTTCCT
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/01444
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Mary A. Appollina
STREET: P.O. Box 2000, 126 E. Lincoln Ave.
CITY: Rahway
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
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REGISTRATION NUMBER: 34,087
REGISTRATION NUMBER: 34,087
REFERENCE/DOCKET NUMBER: 1939
TELECOMMUNICATION INFORMATION:
TELEPHONE: 908-594-3462
TELEFAX: 908-594-4720
                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1499 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: ODNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ANTI-SENSE: NO
US-08-415-818-11
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Fatent No. 5621079
GENERAL INFORMATION:
APPLICANT: Cascieri, Margaret A. APPLICANT: Linemeyer, David L. APPLICANT: MacMeil, Douglas J. APPLICANT: Strader, Catherine D. APPLICANT: Strader, Catherine D. APPLICANT: Tan, Carina P. APPLICANT: Tan, Carina P. TITLE OF INVENTION: NEUROPEPTIDE Y RECEPTOR NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
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STREET: P.O. Box 2000, 126 E. Lincoln Ave
CITY: Rahway
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ZIP: 07065
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: DAYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/415,818
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CLASSIPPICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/383,746
FILING DATE: 03-FEB-1995
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        Length 1499;
Query Match 20.2%; Score 266; DB 1; Length 14
Best Local Similarity 53.9%; Pred. No. 1.8e-57;
Matches 592; Conservative 0; Mismatches 500; Indels
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194 270 254 390 371

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                                                           , ANTI-SENSE: NO US-08-894-236-11
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              G---CGAGCTGGGCACATGAAGCAGGTCAATGTGGTGCTGGTGGTGATGGTGGTGGCTT
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Cascieri, Margaret A.
APPLICANT: Cascieri, Margaret A.
APPLICANT: MacNeil, Douglas J.
APPLICANT: Shado, Lini-Lin
APPLICANT: Strader, Catherine D.
APPLICANT: Tan, Carina P.
APPLICANT: Tan, Carina P.
APPLICANT: Tan, Carina P.
APPLICANT: Weinberg, David H.
TITLE OF INVENTION: NEUROPEPTIDE Y RECEPTOR NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS: AADDRESSEE: Mary A. Appollina
STREET: P.O. Box 2000, 126 E. Lincoln Ave.
CITY: Rahway
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APPLICATION NUMBER: US/08/894,236
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/383,746
FILING DATE: 03-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/15,818
FILING DATE: 03-APR-1995
ATTORNEY/ABRI INFORMATION:
NAME: APPOLITINA, MATY A.
REGISTRATION NUMBER: 34,087
REFERENCE/DOCKET NUMBER: 19390Y
TELECHONE: 908-594-3462
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 11, Application US/08894236
Patent No. 5939263
GENERAL INFORMATION:
APPLICANT: CASCIENT, Margaret A.
APPLICANT: Linemeyer, David L.
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INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERASICS:
LENGTH: 1499 base pairs
TYPE: nucleic acid
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OPERATING SYSTEM: PC-DCS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/01444
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 11. Application PC/TUS9601444
Sequence 11. Application PC/TUS9601444
GENERAL INFORMATION:
APPLICANT: Cascieri, Margaret A.
APPLICANT: Linemeyer, David L.
APPLICANT: Shiao, Lin-Lin
APPLICANT: Strader, Catherine D.
APPLICANT: Tan, Cather D.
APPLICANT: Weinberg, David H.
TITLE OF INVENTION: NEUROPEPTIDE Y RECEPTOR
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSES: Mary A Appollina
STREET: P.O. BOX 2000, 126 E. Lincoln Ave.
CITY: Rahway
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APPLICATION DATA:
APPLICATION NUMBER: 08/383,746
FILING DATE: 03-FEB-1995
FILING DATE: 03-FEB-1995
FILING DATE: 03-FEB-1995
APPLICATION NUMBER: 08/415,818
FILING DATE: 03-APR-1995
ATTORNEY/AGENT INFORMATION:
NAME: APPOILING, MARY A.
REGISTRATION NUMBER: 19390Y
REFERENCE/DOCKET NUMBER: 19390Y
TELECOMMUNICATION INFORMATION:
TELEPHONE: 908-594-3462
INFORMATION FOR SEQ ID NO:
INFOR
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
POLICY
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MOLECULE TYPE: cDN
HYPOTHETICAL: NO
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Patent No. 6087154
GENERAL INFERMATION:
APPLICANT: Baez, Melvyn
APPLICANT: Cates, Carolyn A.
TITLE OF INVENTION: RHESUS NEUROPEPTIDE Y1 RECEPTOR
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESSE:
ADDRESSEE: Lill illly and Company
STREET: Lill Corporate Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: Indiana
COUNTRY: United States of America
ZIP: 46285
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGTCCAATCCCATTTAACCAGGTCTA 1224
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CITY: Indianapolis
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US-09-045-186-3
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                                                                                                                                                                           Sequence 1, Application US/09045186
Patent No. 6087154
GENERAL INFORMATION:
APPLICANT: Gates, Melvyn
APPLICANT: Cates, Carolyn A.
TITLE OF INVENTION: RHESUS NEUROPEPTIDE Y1 RECEPTOR
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/045,186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Eli Lilly and Company
STREET: Lill Corporate Center
CITY: Indianapolis
STATE: Indiana
COUNTRY: United States of America
ZIP: 46285
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REGISTRATION NUMBER: 36,808
REGISTRAFODCKET NUMBER: P-11376
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 276-0756
1231 CTCCACTATGCACACAGA 1248
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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STRANDEDNESS: single
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Best Local Similarity
Matches 576; Conserv
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LOCATION:
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19.5%; Score 257.6; DB 3;
Best Local Similarity 38.0%; Pred. No. 2e-55;
Matches 398; Conservative 178; Mismatches 459;
                                            NAME: Gaylo, Paul J.
REGISTRATION NUMBER: 36,808
REFRENCS/DOCKET NUMBER: P-11376
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 276-0756
TELEFAX: (317) 276-0766
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1152 base pairs
TYPE: mucleic acid
STRANDEDMESS: single
TOPOLOGY: linear
MOLECTLE TYPE: mRNA
APPLICATION NUMBER: US/09/045,186
                                 ATTORNEY/AGENT INFORMATION:
             FILING DATE:
CLASSIFICATION:
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                                                                 GCACCATGAGGCCATCCCCATCTGCCACGGGAACCTCATCTTCTTAGTGTGCCACTTGCT
                                                                                                       1137 GCATCTGCCCCTGTCCACAGTACATACGGAAGTCTCCAAAGGGTCCCTGAGGCTAAGTGG
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May 10, 2004, 22:22:56; Search time 582 Seconds (without alignments) 10274.207 Million cell updates/sec
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1 AGTATTGTTTGTCTGTTTGC.......CCAGCATTCCTGGCTTTCTG 1320
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Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                                                                                                                                                         2941586 segs, 2264995651 residues
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Maximum Match 100%
Listing first 45 summaries
                                             OM nucleic - nucleic search, using sw model
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                                                                                                                     US-09-430-775-1
                                                                                                                     Title:
Perfect score:
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                                                                      Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES			Description	Seguence 4424, Ap	Sequence 1061, Ap	Sequence 11, Appl	Sequence 202, App	Seguence 21172, A	Seguence 12634, A	Sequence 1, Appli	Sequence 9, Appli	Sequence 9, Appli	Seguence 1, Appli	Sequence 3, Appli	Sequence 3, Appli	Sequence 1, Appli	Sequence 3, Appli
	de		dı	US-09-864-761-4424	US-10-305-720-1061	US-10-181-906-11	US-10-225-567A-202	US-09-864-761-21172	US-10-029-386-12634	US-09-900-497-1	US-10-309-515-9	US-10-126-764-9	US-09-771-956-1	US-10-410-648-3	US-10-013-846-3	US-10-083-245-1	US-10-274-851-3
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			Match Length DB	1959	1180	1128	1128	983	581	2281	1155	1155	1605	1605	1605	1605	1605
		Query	Match	91.7	89.4	85.5	85.5	72.7	43.1	21.1	19.5	19.5	19.5	19.5	19.5	19.5	19.5
			Score	1210	1180	1128	1128	959.4	569.2	278.6	257.6	257.6	257.6	257.6	257.6	257.6	257.6
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aquence 1, App aquence 1231, aquence 2, App aquence 538, A aquence 339, A aquence 339, A aquence 139, A aquence 11438, aquence 1163, aquence 1163, aquence 116, Ap aquence 11, Ap aquence 177, Ap aquence 25, App aquence 24, Ap aquence 24, Ap aquence 24, Ap	Sequence 6.57, App Sequence 3, Appli Sequence 37, Appl Sequence 137, Appl Sequence 1062, Ap Sequence 1, Appli Sequence 7, Appli
US-10-291-446-1 US-10-305-720-12 US-10-17-284-25 US-10-017-287-25 US-10-1225-567-27 US-10-125-567-27 US-10-125-567-37 US-10-198-846-11 US-10-198-846-11 US-10-198-846-11 US-10-198-966-15 US-10-181-906-15 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17 US-10-251-382-17	S US-10-225 US-09-292- S US-10-366 G US-10-366 6 US-10-305 5 US-10-188 3 US-10-181
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ALIGNMENTS

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APPLICANT: Thankal, David K.

APPLICANT: Chem, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: US/09/864,761
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR PLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR PRIOR DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 60/203,366
PRIOR PRIOR DATE: 2000-06-3
PRIOR PRIOR DATE: 2000-06-3
PRIOR PRIOR DATE: 2000-06-3
PRIOR PRIOR DATE: 2000-01-0-4
PRIOR PLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR PLING DATE: 2001-01-30
PRIOR PRIOR DATE: 2001-01-30
Sequence 4424, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION: APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David R.
APPLICANT: Chen, Wensheng
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91.7%; Score 1210; DB 9; Length 1959;
Best Local Similarity 96.9%; Pred. No. 0;
Matches 1279; Conservative 0; Mismatches 34; Indels 7
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TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.4
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.5
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.5
INAME/KEY: unsure
LOCATION: 446
NAME/KEY: unsure
LOCATION: 450
NAME/KEY: unsure
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NAME/KEY: unsure
LOCATION: 459
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NAME/KEY: unsure
LOCATION: 884
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PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00662
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR FILING DATE: 2001-01-30
PRIOR PLICATION NUMBER: PCT/US01/00670
PRIOR PELICATION NUMBER: US 60/234,687
PRIOR PILING DATE: 2000-09-21
PRIOR PLICATION NUMBER: US 09/608,408
PRIOR PLICATION NUMBER: US 09/608,408
PRIOR PLICATION NUMBER: US 09/774,203
PRIOR PLICATION NUMBER: US 09/774,203
PRIOR PRILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers: 1.1
SENGTH: 1959
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85.5%; Score 1128; D

Best Local Similarity 100.0%; Pred. No. 0;

Matches 1128; Conservative 0; Mismatches
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COCGANISM: Homo sapiens
US-10-181-906-11
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US-10-181-906-11
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                                                                                                                      Sequence 1061, Application US/10305720

Publication No. US20040010136A1

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Au-Young, Janice K.; Seilhamer, Jeffrey J.

TITLE OF INVENTION: Composition for the Detection of Signaling Pathway Gene Expressic FILE REFERENCE: PA-0002-1 CON

CURRENT APPLICATION NUMBER: US/10/305,720

CURRENT APPLICATION NUMBER: 09/016,434

PRIOR FILING DATE: 1998-01-30

NUMBER OF SEQ ID NOS: 1490

SOFTWARE: PERL PROGram

SEQ ID NO 1061

LENGHAL: 1180
1343 CACTTAGCTAAGTGGGCACACTGCAAGCTGGGTGGCACCC--AGATTCCTGGCTTTCTG 1400
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) OTHER INFORMATION: GenBank ID No. US20040010136A1 g1063629
US-10-305-720-1061
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89.4%; Score 1180; Di
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1180; Conservative 0; Mismatches
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ORGANISM: Homo sapiens
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GENERAL INFORMATION: APPLICANT: LifeSpan Biosciences APPLICANT: Brown, Joseph P. APPLICANT: Brown, Joseph P. APPLICANT: Brimer, Glenna C. APPLICANT: Roush, Christine L. TILLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS FILE REFRENCE: 1920-44 CURRENT APPLICATION NUMBER: US/10/225,567A CURRENT APPLICATION NUMBER: 60/257,144 PRIOR FILING DATE: 2000-12-19 NUMBER OF SEQ ID NOS: 2292 SOFTWARE: Patentin version 3.1 SEQ ID NO 2022	; TYPE: DNA ; ORGANISM: Homo sapiens US-10-225-567A-202 Query Match	Qy 208 ATGGTCTTCATCGTCACCTTCTACAGCATTGAGACTGTCGTGGGGGGTCCTGGGTAACCTC 267 Db 121 ATGGTCTTCATCGTCACTTCCTACAGCATTGAGACTGTCGTGGGGTCCTGGGTAACCTC 180 Qy 268 TGCCTGATGTGTGTGTGTGTGTGAGCAGAAGGCAACGTGACCTACTTGCTTATC 327 Db 181 TGCCTGATGTGTGTGTGACTTCTCATGTGAGAGAAAGCCAACGTGACCACCTGCTTATC 240 Qy 328 GCCAACCTGGCCTTCTCTGACTTCTCATGTGCTCTCTTGCAGCTGCTGCTGACCGTGACCGCTC 300 Qy 38 TACACCATCTTGACTTCTGACTTTTGGAGAGACCTCTTGCAGTGACCGTGACCGTC 300 Qy 38 TACACCATCATGGACTTTTTGGAGAGACCTTTTGGAGAGACCTTCTCATC 47 Db 301 TACACCATCATGGACTACTTTGGAGAGACCTTTTGCAAGATGTCGATCATCATC 360 Db 301 TACACCATCATGGACTACTTTGGAGAGACCTTTTGCAAGATGTCGAAGATGTCATC 360	48 CAGTGCATGTCGGGTCTCCATCCTTCGGTCGTCGTCGTGGGCCTTGGAGAGGCAT	QY 688 IGTACCGAGTCCTGGCTCACCACCGCACCATCTACACCACCTTCCTGCTCCTC 747 Db 601 IGTACCGAGTCCTGGCTCACCACCGCACCATCTACACCACCTTCCTGGTCCTC 660 QY 748 ITCCAGTACTGCCTCCCACTGGGCTTCATCCTGGTCTTATGCACGATCTACCGGCGC 807 Db 661 ITCCAGTACTGCCTCCCACTGGGCTTCATCCTGGTCTTATGCACGATCTACCGGCGC 720 QY 808 CTGCAGAGGCGCGTGTTTCACAAGGGCACCTACAGGCACTTGCGGCCACTTGGGCGCCACTTGGACGCACCATG 867
OY 208 ATGGTCTTCATCGTCACTTCCTACAGCATTGAGACTGTGGGGGGGTCCTGGGTAACCTC 267 121 ATGGTCTTCATCGTCACTTCCTACAGCATTGAGACTGTCGGGGGGTCCTGGGTAACCTC 180 268 TGCCTGATGTGTGACTGTGAGCAGAAGAAAGCCAACGTGACCTGGGTTATC 327 181 TGCCTGATGTGTGACTGTGAGCAGAAGAAAGCCAACGTGACCACCTGCTTATC 327 182 TGCCTGATGTGTGACTGTGACTGTGACTGTGCTCCTCTGCCAGCGCTGACCTGCTTATC 240 QY 328 GCCAACCTGGCTTCTTCTGAAGACAAGAGAAAAGCCAACGTGACCACCTGCTGTTATC 240 Db 241 GCCAACCTGGCTTCTTCTGTGTTCCTCTTTGTGCTCTCTTGCAGCGCTTCTTTTGTGACTGCTTCTTTTGTGACTGCTTTTTGTGACTGCTTTTTTGTGACTTTTTTTT	448 CAGTGCATGTCGGTGACGGTCTCCTCTCGTCGTCGTCGCCCTGGAGAGGCAT 50	688 TGTACCAAGAACCACTCCAAGGCTCTGGAGTTCCTGGCAGATAAGGTGGTC 6 688 TGTACCGAGTCCTGGCCTCCCACCGCCACCATCTACACCACCACTACACCACTCCTCCTCCTC 601 TGTACCGAGTCCTGGCTCACCACCGCACCTCTACACCACCTCCTCCTC 748 TTCCAGTACTGCCTCCCACTGGCTTCATCCTGGTCTTATGCACGCATCTACCGGCG 6 661 TTCCAGTACTGCCTCCCACTGGCTTCATCCTGGTTATGCACGCATCTACCGGCG 7 661 TTCCAGTACTGCCTCCCACTGGCTTCATCCTGGTTATGCACGCATCTACCGGCG 7 661 TTCCAGTACTGCCTCCCACTGGCTTCATCCTGGTTATGCACGCTCTACCGGCG 7 662 TTCCAGTACTGGCTCTCTATCCTGGTTATACACCTTACCGGCGC 7 721 CTGCAGAGGCGGGGTGTTTCACAAGGGCACCTTACAGCTTGCGGCACATG 7 721 CTGCAGAGGCAGGGGCGTGTTTCACAAGGGCACCTTACAGCTTGCGGCACATG 7 721 CTGCAGAGGCAGGGCGTGTTTCACAAGGGCACCTTACAGCTTGCGGTGCTCTGGGTGCTCTGCT 7 721 CTGCAGAGGCAGGGCGTGTTTCACAAGGGCACCTTACAGCTTGCGGTGCTCTGGCTGCTCT 7 721 CTGCAGAGGCAGGCTGGTGATGGTGGTGGTGCTTGCCGTGCTCTGGCTGCTTCT 7 722 CTGCAGAGGCAGGCTGGTGATGGTGGTGGTGTTTTCACAAGCTTTCCGGTGCTCTTCT 7 723 CTGCAGAGGCTGCTTGCTGGTGGTGGTGTTTTCACCAAGGCTTACAGCTTGCCGTGCTCTTCT 7 724 CTGCAGAGCTCACTGGTGGTGATGGTGGTGTGTTCTTGCCGTGCTCTTCTTCTCTTCTCTTCT		iAgcicccccragagagagracagagcarcracccratcracagracaracaaa. Thangagracagagagagagagagagagagagagagagagagag

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241 CAGAAGGAGAAAGCCAACGTGACCAGCTTATCGCCAACCTGGCCTTCTCTGACTTC 300
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TYPE: DNA
ORGANISM: Homo sapiens
FRATURE:
FRATURE:
FRATURE:
FOTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.94
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.5
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.5
OTHER INFORMATION: BST HUMAN HIT: AM376515.1, EVALUE 0.00e+00
OTHER INFORMATION: WISSPROT HIT: P50391, EVALUE 0.00e+00
OTHER INFORMATION: WHIT: Z66526.1, EVALUE 0.00e+00
NAME/KEY: unsure
LOCATION: 309
NAME/KEY: unsure
LOCATION: 319
NAME/KEY: unsure
LOCATION: 314
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PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 21172
LENGTH: 983
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APPLICANT: Hancel, David R.
APPLICANT: Hancel, David R.
APPLICANT: Hancel, David R.
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
TITLE OF INVENTION NUMBER: US/09/864,761
CURRENT FILMS DATE: 2000-05-23
FRIOR APPLICATION NUMBER: US 60/2014.56
FRIOR APPLICATION NUMBER: PCT/USO1/00666
FRIOR APPLICATION NUMBER: PCT/USO1/00667
FRIOR APPLICATION NUMBER: PCT/USO1/00667
FRIOR APPLICATION NUMBER: PCT/USO1/00669
FRIOR APPLICATION NUMBER: PCT/USO1/00661
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FRIOR APPLICATION NUMBER: PCT/USO1/00670
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BST HUMAN HIT: BG875680.1, EVALUE 0.00e+00
WT HIT: Z66526.1, EVALUE 0.00e+00
SWISSPROT HIT: P50391, EVALUE 5.00e-97
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Patent No. US20020082232A1
GENERAL INFORMATION:
APPLICANT: Allan, Keith D.
TITLE OF INVENTION: TRANSGENIC MICE CONTAINING NPY6-R
TITLE OF INVENTION: NEUROPEPTIDE RECEPTOR GENE DISRUPTIONS
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Pred. No. 3.3e-155;
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GENERAL INFORMATION:
APPLICANT: Rank, David R.
TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE REFERENCE ABOMICA-X-2
CURRENT APPLICATION UNDER: US/10/029,386
CURRENT APPLICATION UNDER: US/10/029,386
CURRENT APPLICATION UNDER: 2001.12-20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 12634
FEATURE:
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.66
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.86
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.86
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 0.86
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Sequence 9, Application US/10309515
Publication No. US20030114644A1
GENERAL INFORMATION:
APPLICANT: Bernett Kinrade, Michele
APPLICANT: Berdbeck, Robbin M.
APPLICANT: Waters, Stephen M.
APPLICANT: Waters, Solephen M.
APPLICANT: Waters, Solephen M.
APPLICANT: Waters, Solephen M.
APPLICANT: Waters, Solephen M.
PILOR PERRENCTION NUMBER: US/10/309,515
CURRENT FILING DATE: 2001-04-19
PRIOR FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-18
NUMBER OF SEQ ID NOS: 60
SOFTWARE: PatentIn version 3.1
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Best Local Similarity 55.08; Processor No. 226-64; Matches 576; Conservative 0; Mismatches 459;
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US-10-309-515-9
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Pred. No. 2.2e-70;
0; Mismatches 554;
                    CURRENT APPLICATION NUMBER: US/09/900,497
CURRENT FILING DATE: 2001-07-06
FRIOR APPLICATION NUMBER: US 60/216,260
PRIOR FILING DATE: 2000-07-06
PRIOR FILING DATE: 2000-07-27
NUMBER OF SEQ ID NOS: 3
SOFTWARE: FastSEQ for Windows Version 4.0
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| Publication No. US20030166834A1
| GENERAL INFORMATION:
| APPLICANT: Bennett Kinrade, Michele
| APPLICANT: Brodbeck, Robbin
| APPLICANT: Krause, James
| TITLE OF INVENTION: MILLANIN CONCENTRATING HORMONE RECEPTORS
| TITLE OF INVENTION: MILLANIN CONCENTRATING HORMONE RECEPTORS
| FILE REFERENCE: NOO.2102
| CURRENT APPLICATION WIMBER: US/10/126,764
| PRIOR APPLICATION WIMBER: 60/284,835
| PRIOR FILING DATE: 2001-04-19
| NUMBER OF SEQ ID NOS: 58
| SOFFWARE: Patentin Version 3.1
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; LENGTH: 1155
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-126-764-9
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APPLICANT: Delcubaert, Stephane W.
APPLICANT: Delcubaert, Stephane W.
APPLICANT: Huchingon, Alan W.
APPLICANT: Tran, Jennifer W.
APPLICANT: Tran, Jennifer W.
APPLICANT: Zheng, Xiaozhang W.
APPLICANT: Zheng, Xiaozhang W.
APPLICANT: Zheng, Xiaozhang W.
APPLICANT: Elliott, Richard L.
APPLICANT: Hammond, Marlys L.
TITLE OF INVENTION: SPIRO[ISOBENZOFURAN-1,4'-PIPERIDINES
FILE REFERENCE: U 014539-7
CURRENT APPLICATION NUMBER: US/10/410,648
FILE REPERION NUMBER: 10/013,846
PRIOR APPLICATION NUMBER: 10/013,846
PRIOR PELING DATE: 2001-12-11
PRIOR APPLICATION NUMBER: 60/254,990
PRIOR FILING DATE: 2000-12-12
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin version 3.1
SEQ ID NO 3
TENNOM: 1.66
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0; Mismatches 459;
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; ORGANISM: Homo sapiens
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Patent No. US20010031474A1
GENERAL INFORMATION:
PAPLICANT: Bennett, Michele
APPLICANT: Rrause, James
APPLICANT: Rrause, James
TITLE OF INVENTION: Chimeric Neuropeptide Y F
FILE REFERENCE: N2000.001
CURRENT APPLICATION NUMBER: US/09/771,956
CURRENT FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 31
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 1605
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RESULT 12 US-10-013-846-3 ; Sequence 3, Application US/10013846 ; Publication No. US20030036652A1

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APPLICANT: Bakthavatchalam, Rajagopal
APPLICANT: Blum, Charles A
APPLICANT: Blum, Charles A
APPLICANT: Briehman, Harry L
APPLICANT: Briehman, Harry L
APPLICANT: De Lombaert, Stephane
APPLICANT: Hutchison, Alan
APPLICANT: Tran, Jennifer
APPLICANT: Tran, Jennifer
APPLICANT: Tran, Jennifer
APPLICANT: Trans Spirolisobenzofuran-1,4'-piperidines
APPLICANT: Blinct, Richard L
APPLICANT: Mammond, Marlys
TITLE OF INVENTION: 3H-spirolisobenzofuran-1,4'-piperidines
TITLE OF INVENTION: 3H-spirolisobenzofuran-1,4'-piperidines
TITLE OF INVENTION: 3H-spirolisobenzofuran-1,4'-piperidines
TITLE REFERENCE: NOO-2001
CURRENT FILING DATE: 2000-12-12
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH 1605
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Pred. No. 2.5e-64;
0; Mismatches 459; Indels
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Best Local Similarity 55.0%;
Matches 576; Conservative
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US-10-013-846-3
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Publication No. US20030144290A1
GENERAL INFORMATION:
APPLICANT: Blum, Charles
APPLICANT: De Lombaert, Stephane
APPLICANT: Zheng, Xiaozhang
TILLE OF INVENTION: UBERIUTURE 2-CYCLOHEXYL-4-PHENYL-1H-IMIDAZOLE
TILLE OF INVENTION: DERIVATIVES
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Sequence 1, Application US/10083245

Publication No. US2030069246A1

GENERAL INFORMATION:

APPLICANT: Darrow, James W.

APPLICANT: Blum, Charles

APPLICANT: Blum, Charles

APPLICANT: Tran, Jennifer

APPLICANT: Gargiordano, Mark

APPLICANT: Gargior Philip Albert

APPLICANT: Carpino, Philip Albert

TITLE OF INVENTION: [1,5-a]-1,5-Pyrimidines and pyrazolo

TITLE OF INVENTION: [1,5-a]-1,3,5-Triazines

FILE REPERENCE: U012955-3

CURRENT APPLICATION NUMBER: US/10/083,245

CURRENT APPLICATION NUMBER: US/20/676,970

PRICR PILING DATE: 2000-09-29

NUMBER: OF SEQ ID NOS: 1

SEQ ID NO
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19.5%; Score 257.6; DB 15; Length
Best Local Similarity 55.0%; Pred. No. 2.5e-64;
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Pred. No. 2.5e-64;
0; Mismatches 459;
; FILE REFERENCE: U 014209-8
; CURRENT APPLICATION NUMBER: US/10/274,851
; CURRENT FILING DATE: 2002-10-21
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 1605
; TYPE: DNA
; ORGANISM: HOMO Sapiens
US-10-274-851-3
                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 55.0%;
Matches 576; Conservative
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                                                               GAAGGAGATCAAGGCCCTGGTGCTGACTTGCCAGCAGAGCGCCCCCTGGAGGAGTCGGA
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APPLICANT: Tran, Jennifer
APPLICANT: Tran, Jennifer
APPLICANT: De Lombaert, Stephane
APPLICANT: Hodgetts, Kevin J.
APPLICANT: Garpino, Philip A.
APPLICANT: Garpino, Philip A.
APPLICANT: Griffith, David A.
TITLE OF INVENTION: Certain Alkylene Diamine-Substituted Heterocycles
FILE REFERENCE: U 014242-0
CURRENT FILING DATE: 2002-11-08
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin Ver. 2.0
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Pred. No. 2.5e-64;
0; Mismatches 459; Indels
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Search completed: May 11, 2004, 11:01:35 Job time : 588 secs

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GenCore version 5.1.6
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- protein search, using sw model OM protein

(without alignments) 1826.816 Million cell updates/sec May 11, 2004, 12:50:36 ; Search time 58 Seconds Run on:

US-09-430-775-2 1965 1 MNTSHLLALLLPKSPQGENR.....TVHTEVSKGSLRLSGRSNPI 375 Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1586107 segs, 282547505 residues Searched:

1586107

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Total number of hits satisfying chosen parameters:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

A Geneseq 29Jan04:*

1: geneseq1990s:*

2: geneseq190s:*

4: geneseq2000s:*

5: geneseq2003s:*

6: geneseq2003as:*

7: geneseq2003as:* geneseqp2004s:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Aae06691 Human neu	Abb84501 Human hip	Abp81859 Human neu	13	Abg73516 Murine NY	_	517	0	001	Abg73519 C. porcel	101 Mou	9 Mouse	1499 Human l	4 Rhesus	3 Human	Aar35494 Human NPY	Aae07956 Human neu	Aae07920 Human neu	Aab85119 Human neu	Aab85108 Human neu	Aae08000 Human neu	Aaul0585 Human neu	Abb79509 Human neu	Abj37037 Human bre	Abr47546 Breast ca
Catalana	ID	AAE06691	ABB84501	ABP81859	AAR79119	ABG73516	AAR79120	ABG73517	ABG73520	AAE08001	ABG73519	AAW02101	AAW02099	ABB84499	AAB14324	AAR35493	AAR35494	AAE07956	AAE07920	AAB85119	AAB85108	AAE08000	AAU10585	ABB79509	ABJ37037	ABR47546
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Abp81946 Human neu	Aao23265 Human neu	Abw01461 Human neu	Aaw03014 Modified	_	Abg73518 Rabbit NY	Aae06688 Human neu		Aaw03013 Modified	Aaw02100 Human neu	Aar97196 Mouse neu	Aar48751 G-protein	Aaw02723 G-protein	Aae06693 Human neu	Abp81945 Human neu	Pig	Aae08009 Dog chime	Aae08013 Rat chime	Aae08005 Human chi	Abb79512 Chimeric
ABP81946	AA023265	ABW01461	AAW03014	AAW03012	ABG73518	AAE06688	AAR43913	AAW03013	AAW02100	AAR97196	AAR48751	AAW02723	AAE06693	ABP81945	AAE08015	AAE08009	AAE08013	AAE08005	ABB79512
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56	27	28	53	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

Human; neuropeptide Y; NPY; bone disease; bone mass; gene therapy; exerbivosinal fluid; CSF; inositol phosphate; IP; Paget's disease; fracture; extracellular signal-regulated kinase; ERK; osteoporosis; osteopenia; bone metastasis; neurotransmitter; osteogenic; Human neuropeptide Y (NPY) Y4 receptor. AAE06691 standard; protein; 375 AA. (first entry) NPY Y4 receptor, 16-OCT-2001 AAE06691; AAE0669

Homo sapiens.

WO200153477-A1.

26-JUL-2001.

22-JAN-2001; 2001WO-US002040. 20-JAN-2000; 2000US-00489872. (BAYU) BAYLOR COLLEGE MEDICINE (AMLI/) AMLING M.

Ducy P; Amling M, Karsenty G,

WPI; 2001-488709/53. N-PSDB; AAD12802.

Treating or preventing reduced bone mass, e.g. osteoporosis, by reducing the level of neuropeptide Y activity in blood or cerebrospinal fluid.

Example 7; Page 86; 102pp; English.

The present invention relates to a method for treatment or prevention of bone diseases characterised by loss of bone mass, comprises administering to a mammal a compound that lowers the level of neuropeptide Y (NPY) in the serum or cerebrospinal fillid (CSF) or a compound that lowers the level of inositol phosphate (IP) or extracellular signal-regulated kinase (ERK). The method is specifically used to treat (including by gene therapy) or prevent osteoporosis, osteopenia or Paget's disease, but may also be used e.g., in cases of fractures or bone metastases. These diseases may also be diagnosed by detecting elevated NPY levels,

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including monitoring of treatment, assessing efficacy of compounds in clinical trials and for identifying subjects at risk. The present sequence is a human NPY Y4 receptor
                                                                                                                                        0; Gaps
                                                                                                     100.0%; Score 1965; DB 4; Length 375; ilarity 100.0%; Pred. No. 7.3e-193; Conservative 0; Mismatches 0; Indels 0;
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/label= transmembrane_domain_V 267. .290
/label= transmembrane_domain_VI
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Matches 375; Conserv
                                                                         Sequence 375 AA;
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This invention describes a novel method of modifying feeding behaviour of a subject which involves administering to the subject an amount of a subject which involves administering to the subject an amount of compound which is a YS receptor agoingt or antagonist or antagonist effective to increase or decrease, respectively, the consumption of food by the subject so as to modify feeding behaviour of the subject. Tranquiliser, antagonist, anorectio, antidepressant, tranquiliser, antimigrature, analgesic, hypotensive, cerebroprotective, cardiant, antimigrature, analgesic, hypotensive, cerebroprotective, cardiant, receptor agonist or antagonist convolute are useful for treating an abnormality alleviated by the inhibition or activation of YS receptor, in a subject. Antibodies raised against the receptor are useful for treating the presence of the receptor on the surface of a cell. The agonist of YS receptor is useful for treating an abnormality includes anormality in a subject, where the abnormality includes anorexia, sexual/reproductive subject, where the abnormality includes anorexia, sexual/reproductive ceizure, hypertension, cerebral memory loss, migraine, pain, epileptic failure, aleeve disturbance, nasal congestion, and diarrhoea. This disclosure of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                      Modifying feeding behavior of subject, useful in treating feeding disorders, involves administering to subject Y5 receptor agonist on antagonist, to increase or decrease consumption of food by subject.
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                                                                                                                                                                                                                                                                                                                       Gerald CPG, Weinshank RL, Walker MW, Branchek T;
303. .325
/label= transmembrane_domain_VII
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98US-00200673.
                                                                                                                                                 24-SEP-2001; 2001US-00962646.
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Matches 375; Conservative
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                                                               US2002103123-A1.
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25-NOV-1998;
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The present invention describes antigenic peptides (1) comprising: (a) any one of 1601 sequences (see ABP82019 to ABS83619) of 12-24 amino caids. Also described: (1) an assay for the detection of a particular G protein-coupled receptor (GPCR) or a candidate polypeptide in a sample; and (2) an isolated antibody having high specificity and high affinity or avidity for a particular GPCR. (1) can be used as GPCR modulators and in carbity for a particular GPCR. (1) can be used as GPCR modulators and in antibodies. The perticular GPCR, and in the production of specific antibody against a particular GPCR, and in the production of specific antibodies. The perticular GPCR. The antigodies of detecting the presence or absence of corresponding GPCRs. The antigodie for GPCRs and antibodies are useful for diagnosing and designing drugs for presence or absence of corresponding GPCRs. The antigodies for GPCRs and antibodies are useful for diagnosing and designing drugs for treating immune-related diseases, immunological-related call proliferative diseases, or autoimmune diseases, immunological-related call proliferative atheresclerosis, bacterial, fungal, protozoan or viral infections, atheresclerosis, crohn, s disease, varial infections, osteoporosis, cardiomyopathy, chronic and acute inflammation, allergies, Crohn, s disease, diabetes, graft versus host disease, Parkinson's disease, multiple sclerosis, pain, psoriasis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G protein-coupled receptor; GPCR; antigenic peptide; gene therapy; G protein-coupled receptor modulator; antibody; immune-related disease; growth-related disease; allo growth-related disease; allo growth-related cell proliferative disease; autoimmune disease; Alzheimer's disease; alloriferative disease; atteimen's disease; alloriferative disease; alteriated cell proliferative disease; atteimen's disease; alloriferative disease; atteimen's disease; alloriferative disease; atteimen's disease; atteimen's disease; paintiple sclarosis; paintiple versus host disease; backinson's disease; multiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple sclarosis; paintiple
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                                301 NLIFLYCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESBHLPLSTVHTE 360
NLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human neuropeptide Y receptor type 4 protein SEQ ID NO:203.
                                                                                                                                                                                                                                                                                                                                                                              ABP81859 standard; protein; 375 AA
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anxiety, depression, schizophrenia, dementia, mental retardation, memor loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension, hypotension, real disorders, rheumatoid arthritis, trauma, ulcers, or any other disorder in which GPCRs are involved. The antibodies may be used in immunoassays and immunodiagnosis. ABZ42523 to ABZ42869 encode GPCR proteins given in ABP81675 to ABP82018, which are used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                      121 QCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL
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                                                                                                                                                                                                                                                                                61 CLMCVTVRQXEKANVTNLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFI
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therapeutic.
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                                                                                                                                            Query Match 100.0%; Score 1965; DB 6; Length 375; Best Local Similarity 100.0%; Pred. No. 7.3e-193; Matches 375; Conservative 0; Mismatches 0; Indels 0
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                                                                                                                    Sequence 375 AA;
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WPI; 2003-058304/05 Sequence 375 AA; WO200268591-A2. Mus musculus Kornacker M, 06-SEP-2002 61 121 61 Feder J, ò ď ઠે g δ 셤 ò a ò ö 180 360 360 240 240 300 61 CIMCVIVROKEKANVINILIANILAFSDFILMCILCOPIJAVYIIMDYWIFGETLCKMSAFI 120 120 180 LORQGRVFHKGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHG 300 The sequence represents a human neuropeptide Y/peptide YY/ pncretic polypeptide (Y4) receptor, which can be used to screen drugs which bind to it, specifically to find liganda (agonists or antagonists) which bind to it. The ligands can be used to treat abnormalities, specifically the antagonists can be used to treat amnesia, feeding disorders, epilepsy, hypertension, sleeping disorders or pain 9 etc. 9 NLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE LOROGRVFHKGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHG NLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 1 MNTSHLLALLLÞKSÞÓGENRSKÞLGTÞYNFSEHCQDSVÞVMVFIVTSYSIETVVGVLGNL QCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL ENVFHKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR leic acid encoding a Y4-Receptor, anti-sense mols. and ligands for treating amnesia, feeding/sleeping disorders or epilepsy, ¢ 1 MNTSHLLALLLPKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNL Gaps ô Length 375 Indels Query Match 99.5%; Score 1956; DB 2; Best Local Similarity 99.5%; Pred. No. 6.1e-192; Matches 373; Conservative 1; Mismatches 1; Weinshank RL; Ė Disclosure; Fig 1; 154pp; English 375 Branchek VSKGSLRLSGRSNPI 375 VSKGSLRLSGRSNPI 375 94WO-US014436 93US-00176412 protein SEQ ID (SYNA-) SYNAPTIC PHARM Walker MW, 1995-246190/32 standard; Sequence 375 AA; WPI; 1995-246190 N-PSDB; AAQ94171 28-DEC-1993; 28-DEC-1994; New nucleic useful for t Murine NY4R WO9517906-A1 19 121 181 241 241 301 301 361 181 ABG73516 ABG73516, Bard JA, ABG73516
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This invention describes the novel human G-protein coupled receptors (GPCR'S), HGPRBMY1 or HGPRBMY2 which have immunosuppressive, cardiant, neuroprotective, antiinflammatory, cytostatic and vulnerary activity and comprising HGPRBMY1 or HGPRBMY2 polypetides or their agonists or comprising HGPRBMY1 or HGPRBMY2 polypetides or their agonists or antagonists or modulators, or a HGPRBMY1- or HGPRBMY2-specific antibody are seeful for preventing, treating or ameliorating a medical condition comprising autoimmune, cardiovacular, neural, reproductive, haematopoietic, pulmonary, gastrointestinal or proliferating disorder, a cell cycle or birth defect, a disorder related to abstrant phosphorylation, acute phase responses or signal transduction or to hyperimmune activity, an inflammatory or hypercongenital condition, a necroit clesion, a wound, organ transplant rejection or a condition or related to organ transplant rejection. This sequence represents a G-protein coupled receptor associated with the human HGPRBMY proteins
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G-protein coupled receptor; HGPRBMY1; HGPRBMY2; immunosuppressive; cardiant; neuroprotective; antiinflammatory; cytostatic; vulnerary; vaccine; gene therapy; autoimmune; cardiovascular; neural; reproductive; haematopoietic; pulmonary; gastrointestinal; proliferation; cell cycle; birth defect; aberrant phosphorylation; acute phase response; receptor; signal transduction; hyperimmune activity; inflammatory; hypercongenital; necrotic lesion; wound; organ transplant rejection.
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23-FEB-2001; 2001US-0270793P.
06-JUN-2001; 2001US-0296427P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid encoding a Y4-Receptor, anti-sense mols. and ligands - ful for treating amnesia, feeding/sleeping disorders or epilepsy, etc.
                                           241 LQRQKHVFHAHACSSRAGQMKRINSMLMTMVTAFAVLWLFLHVFNTLEDWYQBALPACHG
                                301 NLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE
                                                                                                                                                                                                                                    Y4 receptor; hp25a neuropeptide receptor; antisense oligonucleotide;
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/note= "transmembrane spanning
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Length 375;

DB 2;

76.0%; Score 1494;

Query Match

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G-protein coupled receptor; HGPRBMY1; HGPRBMY2; immunosuppressive; cardiant; neuroprotective; antiinflammatory; cytostatic; vulnerary; vaccine; gene therapy; autoimmune; cardiovascular; neural; reproductive; haematopoietic; pulmonary; gastrointestinal; proliferation; cell cycle; birth defect; aberrant phosphorylation; acute phase response; receptor; signal transduction; hyperimmune activity; inflammatory; hypercongenital;
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                                                                                                                61 CLIFVITRQKEKSNVTNLLIANLAFSDFLMCLICQPLTVTYTIMDYWIFGEVLCKMLTF1
                                                                                                                                                        OCMSVIVSILSLVIVALERHOLIINPIGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL
                                        1 MNTSHLLALLLPKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNL
                                                          61 CLMCVTVRQKEKANVTNLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKWSAFI
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75.1%; Pred. No. 1.7e-144;
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23-FEB-2001; 2001US-0270793P.
06-JUN-2001; 2001US-0296427P.
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                                                                                                                                                                                                                                                                                                                                                                                        VSKGSLRLSGRSN 373
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LSKGSMRMGSKSN 373
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                     Conservative
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Kornacker M, Bol D;
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Cacace A,

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14-FEB-2003 (first entry)
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This invention describes the novel human G-protein coupled receptors (GPCR's), HGPRBMY1 or HGPRBMY2 which have immunosuppressive, cardiant, neuroprotective, antiinflammatory, cytostatic and vulnerary activity and comprising HGPRBMY1 or HGPRBMY2 polypeptides or their agonists or comprising HGPRBMY1 or HGPRBMY2 polypeptides or their agonists or antagonists or modulators, or a HGPRBMY1- or HGPRBMY2-specific antibody are useful for preventing, treating or ameliorating a medical condition comprising autoimmune, cardiovaecular, neural, reproductive, haematopoietic, pulmonary, gastrointestinal or proliferating disorder, a cell cycle or birth defect, a disorder related to aberrant phosphorylation, acute phase responses or signal transduction or to hyperimmune activity, an inflammatory or hypercongenital condition, a necroic lesion, a wound, organ transplant rejection or a condition or related to organ transplant rejection. This sequence represents a G-protein coupled receptor associated with the human HGPRBMY proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45 CLVVVITRQKEMRNVTNIFIVNLSCSDILVCLVCLPVTLIYTLMDRWILGEALCKVTPFV
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50.1%; Pred. No. 1.1e-89;
live 57; Mismatches 112; Indels
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                                                                                                                                                                                                                                                                                                                 Nelson T,
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                                                                                                                                                                23-FEB-2001; 2001US-0270792P.
23-FEB-2001; 2001US-0270793P.
06-JUN-2001; 2001US-0296427P.
                                                                                                                   22-FEB-2002; 2002WO-US005281
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Matches 188; Conservative
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Kornacker M, Bol D;
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                                                                 06-SEP-2002
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                                    This invention describes the novel human G-protein coupled receptors (GPCR'S), HGPRBNY1 or HGPRBNY2 which have immunosuppressive, cardiant, neuroprotective, antihiflammatory, cytostatic and vulnerary activity and can be used in vaccines or for gene therapy. Pharmaceutical compositions comprising HGPRBNY1 or HGPRBNY2 polypeptides or their agonists or antagonists or modulators, or a HGPRBNY1- or HGPRBNY2-specific antibody are useful for preventing, treating or ameliorating a medical condition comprising autoimmune, cardiovascular, neural, reproductive, haematopoietic, pulmonary, gastrointestinal or proliferating disorder, a call cycle or birth defect, a disorder related to aberrant phosphorylation, acute phase responses or signal transduction or to hyperimmune activity, an inflammatory or hypercongenital condition, a necrotic lesion, a wound, organ transplant rejection or a condition or a condition are coupled receptor associated with the human HGPRBNY proteins described in the disclosure of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 ENVFHKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFOYCLPLGFILVCYARIYRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MATSHILLALLIPKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 76.0%; Score 1494; DB 6; Length 375; Local Similarity 75.1%; Pred. No. 1.7e-144; les 280; Conservative 35; Mismatches 58; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           D. rerio G-protein coupled receptor SEQ ID 51.
Disclosure; Fig 9; 316pp; English.
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18; Gaps

Length 375;

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240

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TEVSKGSLRLSGRSN 373

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TGITKGSILSNGSAS

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The present invention relates to chimeric neuropeptide Y (NPY) receptors. The NPY receptors are G-protein-coupled transmebrane proteins with seven membrane spanning transmembrane (TM) domains. The compounds that modulate the activity of a NPY receptor is useful in the preparation of a medicament for treating conditions including obselity, highlow blood pressure, epilepsy, Huntington's and Parkinson's disorder and eating, seizure, locomotor and anxiety disorders. They can also be used as targets for drug actions, and as basis for drug discovery and development. The NPYS receptor may have an anti-epileptic activity in the control of limbic seizures. The present sequence is rat NPY1 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFIQCMSVTVSILSLVLVAL 137
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New chimeric receptor proteins comprising a single polypeptide chain of amino acids, useful as targets for drug actions, and as basis for drug
                                                                                                                                               Neuropeptide Y; NPY receptor; G-protein-coupled transmembrane protein; transmembrane; TM domain; therapy; obesity; blood pressure; eiplepsy; Huntington's disorder; Parkinson's disorder; seizure; locomotor; anxiety disorder; limbic seizure; tranquilliser; rat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YNFSEH------CQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
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                                                                                                                                                                                                                                                                                            231. .262
/note= "Third intracellular loop domain"
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                                                                                                                   Rat neuropeptide Y1 (NPY1) receptor.
                                                                                                                                                                                                                                                                        Location/Qualifiers
                 Z
                 AAE08001 standard; protein; 382
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                                                                                  (first entry)
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                                                    AAE08001;
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This invention describes the novel human G-protein coupled receptors (GPCR's), HGPRBNY10 which have immunosuppressive, cardiant, neuroprotective, antiinflammatory, cytostatic and vulnerary activity and can be used in vaccines or for gene therapy. Pharmaceutical compositions comprising HGPRBNY10 HGPRBNY2 polypeptides or their agonists or antagonists or modulators, or a HGPRBNY1- or HGPRBNY2-specific antibody are useful for preventing, treating or ameliorating a medical condition comprising autoimmune, cardiovascular, neural, reproductive, haematopoietic, pulmonary, gastrointestinal or proliferating disorder, a cell cycle or birth defect, a disorder related to aberrant phosphorylation, acute phase responses or signal transduction or to hyperimmune activity, an inflammatory or hypercongenital condition, necrotic lesion, a wound, organ transplant rejection or a condition related to organ transplant rejection. This sequence represents a G-protein coupled receptor associated with the human HGPRBMY proteins
                                                                            AGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLIFLVCHLLAMASTC 316
                                                                                                      254 SSETKRINVMLLSIVVAFAVCWLPLTIFNTVFDWNƏQIIATCNHNLLFLLCHLTAMISTC 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                          G-protein coupled receptor; HGPRBMY1; HGPRBMY2; immunosuppressive; cardiant; neuroprotective; antiinflammatory; cytostatic; vulnerary; vaccine; gene therapy; autoimmune; cardiovascular; neural; reproductive; haematopoietic; pulmonary; gastrointestinal; proliferation; cell cycle; birth defect; aberrant phosphorylation; acute phase response; receptor; signal transduction; hyperimmune activity; inflammatory; hypercongenital; necrotic lesion; wound; organ transplant rejection.
                       314 VNPIRYGELNKNFORDLOFFFNFCDFRSRDDDYETIAMSTWHTDVSKTSLK---QASPV 369
                                                                                                                                                           VNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTEVSKGSLRLSGRSNPI 375
KVVCTESWPLAHHRIIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYS-LR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New human HGPRBMYI or HGPRBMY2 polynucleotide and polypeptide, useful preventing, treating or ameliorating a disorder e.g., wound, cardiovascular disorder or transplant rejection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Barber L;
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M, Bol D;
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23-FEB-2001; 2001US-0270793P.
06-JUN-2001; 2001US-0296427P.
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WPI; 1996-371369/37.
N-PSDB; AAT36127.
                                                                                                                     Sequence 382 AA;
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03-APR-1995;
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Weinberg DH,
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                                                                                                                         64 IILKQKEMRNVTNILIVNLSFSDLLVAIMCLPFTFVYTLMDHWIFGBIMCKLNPFVQCVS
                                                                                                                                                                                                                                                                 HKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQ
                                                                                                                                                                                                                                                                                                                                                                                    245 GRVFHKGTYS-LRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                        304 FLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTEVSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 QGENRSKPLGTPYNFSEH------CQDSVDVMVFIVTSYSIETVVGVLGNLCLMC
                                                                                                                                                                         65 VTVRQKEKANVTNLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFIQCMS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA mol. encoding neuro:peptide Y Yx receptor - useful in assays identify cpds. which bind to receptor, useful to treat, e.g. obes diabetes, cardiac vasospasm and Parkinson's disease.
                                                                   21;
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                                   Length 383;
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                                                                   Indels
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                               44.1%; Score 867.5; DB 6;
45.4%; Pred. No. 3.6e-80;
iive 76; Mismatches 106;
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95US-00415818
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Tan CP;
                             Query Match
Best Local Similarity 45.4%
Matches 169; Conservative
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362 TSLK---QASPL 370
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Sequence 383 AA;
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diabetes; car
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03-APR-1995;
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Weinberg |
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AAW02101
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Neuropeptide Y Yx receptor; NPY Yx; G-protein coupled receptor; obesity;
diabetes; cardiac vasospasm; Parkinson's disease.
peptide YY and appears to be a major vascular receptor. It has been cloned and shown to be a G-protein coupled receptor. A DNA sequence encoding NPY YI receptor was used to design PCR primers (AAT36129-32) that were utilised in the construction of probes used to screen a mouse genomic library. This led to the isolation of a DNA fragment (AAT36127 coding for a novel NPY receptor subtype, NPY Yx receptor (AAW02099)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   136 ERHQLIINPRGWRPNNRHAYIGITVIWVLAVASSLPFVIYQIITDEPFQNVS--LAAFKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSETKRINIMLLSIVVAPAVCWLPLTIFNTVFDWNHQIIATCNHNLLFLLCHLTAMISTC
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                                                                                                                                                                                                                                                                                                                                                        28 YNFSEH------CQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
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44.1%; Score 867; DB 2; Length 382;
Best Local Similarity 46.5%; Pred. No. 4e-80;
Matches 167; Conservative 75; Mismatches 101; Indels
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95US-00415818
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25-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; hippocampus; Y5; receptor; feeding behaviour; Y5 receptor; food consumption; metabolic; anorectic; antidepressant; tranquiliser; antimigraine; analgesic; hypotensive; cerebroprotective; cardiant; antidiartnoeic; haemoetatic; vaccine; anorexia; obesity; bulimia; sexual disorder; reproductive disorder; depression; anxiety; memory loss; migraine; pain; epileptic seizure; hypertension; cerebral haemorrhage; shock; congestive heart failure; sleeve disturbance; nasal congestion;
                                                          Mouse neuropeptide Y YX (NPY YX) receptor (AAW02099), a novel subtype of NPY, is a G-protein coupled receptor having 7 transmembrane-spanning domains. Its anino acid sequence was deduced from a genomic DNA fragment (AAT36127) obtd. from a mouse cosmid library. Vectors were constructed to allow expression of the murine NPY YX receptor in mammalian (COS-7) cells. The recombinant receptor, or transformed host cells, can be used modulate the expression of mucleic acids encoding the receptor, or modulate the expression of mucleic acids encoding the receptor. Such cycles. are useful for treating a variety of disease conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         248
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            305 LIAMVSTCINPLFYGFLNKNFQKDLMMLIHHCWCGEPQESYENIAMSTWHTDESKGSLKL 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EKANVINLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFIQCMSVTVSIL 130
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            185 IPTDIYTHQVACVEIWPSKLNQLLFSTSLFMLQYFVPLGFILICYLKIVLCLRKRTRQVD
                                                                                                                                                                                                                                                                                                                                                                                                                      12 PKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTV-RQK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                131 SLVLVALERHOLLINPTGWKPSISOAYLGIVLIWVIACVLSLP-FLANSILENVFHKNHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190 KALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGR-VF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              249 HKGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIFICHGNLIFLVCH
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8
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43.2%; Pred. No. 9.9e-80;
tive 89; Mismatches 108; Indels
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77. .99
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                       Claim 38; Page 49-50; 65pp; English
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                                                                                                                                                                                                                                                                                          Sequence 371 AA;
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This invention describes a novel method of modifying feeding behaviour of a subject which involves administering to the subject an amount of a compound which is a Ys receptor agonist or antagonist effective to increase or decrease, respectively, the consumption of food by the subject so as to modify feeding behaviour of the subject. The product of the invention has metabolic, anotectic, antidepressant, tranquiliser, antidiarine, analgesic, hypotensive, cerebroprotective, cardiant, antidiarine in an absence agonist compounds are useful for treating an abnormality alleviated by the inhibition or activation of Ys receptor, in a subject. The pharmaceutical compositions described in the disclosure are useful for treating an abnormality alleviated by the inhibition or activation of Ys receptor, in a subject. Antibodies raised against the receptor are useful for detecting the presence of the receptor on the surface of a cell. The agonist of Ys receptor is useful for treating an abnormality in a subject, where the abnormality includes anorexia, sexual/reproductive disorder, depression, anxiety, memory loss, migraline, pain, epileptic seizure, hypertension, cerebral haemorrhage, shock, congestive heart sequence represents the human hippocamus Y1 receptor described in the disclosure of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modifying feeding behavior of subject, useful in treating feeding disorders, involves administering to subject Y5 receptor agonist or antagonist, to increase or decrease consumption of food by subject.
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                                                                                                       155. 177
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/label= transmembrane_domain_V
265. 288
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/label= transmembrane_domain_VI
label= transmembrane_domain_II
15. .136
/label= transmembrane_domain_III
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Fig 8A-C; 102pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94US-00349025.
95US-00566096.
98US-00200673.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-SEP-2001; 2001US-00962646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SYNA-) SYNAPTIC PHARM CORP.
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5,

Gaps

21;

Length 383; Indels

DB 3;

Query Match
43.6%; Score 856.5; DB 3;
Best Local Similarity 44.6%; Pred. No. 4.8e-79;
Matches 166; Conservative 77; Mismatches 108;

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The present sequence is the rhesus Y1 receptor, which has affinity for neuropeptide Y, pancreatic peptide and peptide YY. Neuropeptide Y is a peptide present in the central and peripheral nervous systems. The peptide coexists with noradrenaline in many neurons and acts as a neuropransmitter alone or synergistically together with noradrenaline. Neuropeptide Y interacts with a family of closely related receptors. The Y1 receptor subtype appears to be the major vascular neuropeptide Y receptor. The rhesus Y1 recptor is useful in identifying compounds for receptor. The rhesus Y1 recptor is useful in identifying compounds for receptor. The rhesus Y2 second of conditions associated with an excess or deficiency of neuropeptide Y. Such disorders include vasospasm, heart failure, shock, cardiac hypertrophy, increased blood pressure, angina, myocardial infarction, sudden cardiac death, arrhythmia, peripheral vascular disease, and abnormal renal conditions such as impaired flow of fluid, abnormal mass transport, or renal failure
                                             184 FON--VTLDAYKDKYVCFDQFPSDSHRLSYTTLLLVLQYFGPLCFIFICYFKIYIRLKRR 241
                                                                                                                                       245 GRVFHK-GTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLI 303
                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                 FLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTBVSK 363
                                                                                                                                                                                                                                                                                                                       244
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rhesus monkey; Yl receptor; neuropeptide Y; neurotransmitter; vasospasm; heart failure, shock; cardiac hypertrophy; high blood pressure; angina; myocardial infarction; sudden cardiac death; arrhythmia; renal failure; peripheral vascular disease.
185 HKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQ
                                                                                                                                                                                AAB14324 standard; protein; 383 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; Col 33-34; 21pp; English.
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N-PSDB; AAA62587, AAA62588.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-NOV-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                364 GSLRLSGRSNPI 375
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TSLK---QASPV 370
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rhesus Yl receptor
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                      63
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human neuro-peptide Y-Y1 receptor and its DNA - useful for screening for
NPY agonists or antagonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence represents the human neuropeptide Y (NPY) receptor subtype Y1. The cDNA encoding this sequence was isolated from human fetal brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR; domain; primer; human; brain; neuropeptide; Y; NPY-Y1; receptor; isolation; clone; fetal; NPY; probe; adult; hippocampus; cDNA library; subtype Y1; cytoplasmic loop; kC; transmembrane; G protein; rat.
                                                          64 IILKQKEMRNVTNILIVNLSFSDLLVAIMCLPFTFVYTLMDHWVFGEAMCKLNPFVQCVS
                                                                                                          304 FLUCHLLAMASTCVNPFIYGFLNTNFKKBIKALVLTCQQSAPLEESEHLPLSTVHTEVSK
----HCODSVDVMVFIVTSYSIETVVGVLGNLCLMC
                                                                                            125 VTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSILENVF
                                                                                                                                              185 HKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQ
              QVENHS----VHSNFSEKNAQLLAFENDDCHLPLAMIFTLALAYGAVIILGVSGNLALII
                                              65 VIVROKEKANVINILIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFIQCMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure, Page 8-10; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                 AAR35493 standard; protein; 384 AA.
16 QGENRSKPLGTPYNFSE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GARV-) GARVAN INST MEDICAL RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human NPY receptor subtype Y1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shine J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92AU-00003131.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92WO-AU000600
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                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
(first entry)
                                                                                                                                                                                                                                                                                                             362 TSLK---QASPV 370
                                                                                                                                                                                                                                                                                            GSLRLSGRSNPI 375
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23-JUN-1992;
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06-SEP-1993
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us-09-430-775-2.rag

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and human adult hippocampus cDNA libraries, using the primers given in AAQ40766-67 which correspond to position 672-564 and 48-78 in the rat CDNA clone FCSR, respectively. The longest isolated clone encoded the human NPY receptor subtype YI. This clone was used to probe a human genomic library which lead to the isolation of the clone kC (see also AAR35494) which contains the NPY YI receptor gene. The human NPY YI receptor consists of 3 exons and covers approx. 10 kD. The first 57 nucleotides of the 5' untranslated sequence of the human hippocampal NPY YI receptor mRNA are separated by a 6 kD intron from the second exon. The second intron containing an in frame stop codon, is located exactly after the tifth transmembrane domain at nucleotide 908 of the cDNA sequence. The third cytoplasmic loop of the receptor is thought to form a specific domain involved in determination of the specificity of coupling to different G proteins. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 384 AA;
          888888888888888888888
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64 IIIKQKEMRNVTNILIVNLSFSDLLVAIMCLPFTFVYTLMDHWVFGBAMCKLNPFVQCVS 123 245 GRVFHK-GTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLI 303 242 NNPMDKWRDNKYRSSETKRINIMLLSIVVAFAVCWLPLTFNTVFDWNHQIIATCNHNLL 301 FLUCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTEVSK 363 65 VIVROKEKANVINLLIANLAFSDFLMCLLCOPLTAVYTIMDYWIFGETLCKMSAFIQCMS 124 VIVSILSLVLVALERHOLIINPIGWKPSISOAYLGIVLIWVIACVLSLPFLANSILENVF 184 185 HKWHSKALBFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQ 244 63 16 QGENRSKPLGTPYNFSE------HCQDSVDVMVFIVTSYSIETVVGVLGNLCLMC 64 Query Match
Best Local Similarity 44.6%; Pred. No. 4.8e-79;
Matches 166; Conservative 77; Mismatches 108; Indels 21; Gaps 364 GSLRLSGRSNPI 375 362 TSLK---QASPV 370 125 ઠે 셤 B ò à δ

Search completed: May 11, 2004, 12:55:28 Job time : 61 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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OM protein - protein search, using sw model

May 11, 2004, 12:50:37 ; Search time 21 Seconds (without alignments) 1717.706 Million cell updates/sec

Run on:

US-09-430-775-2 1965 1 MNTSHLLALLLPKSPQGENR.....TVHTEVSKGSLRLSGRSNPI 375 Title: Perfect score: Sequence:

Scoring table: BLOSUM62 Gapop 10.0, Gapext 0.5

Total number of hits satisfying chosen parameters:

283366 seqs, 96191526 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR 78: * 1: pir1: * 2: pir2: * 3: pir3: * 4: pir4: * Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	tide y	poly	tide Y	e Y	neuropeptide Y rec	neuropeptide Y/pep	neuropeptide Y/pep	G protein-coupled	G protein-coupled	neuropeptide Y/pep	glucocorticoid-ind	glucocorticoid-ind	hypothetical prote	glucocorticoid-ind	hypothetical prote	1	bombesin-like pept	galanin receptor -		2	bombesin/ GRP rece			gastrin-releasing	×	Phel3 bombesin rec	cal prot	latos	allatostatin recep
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bombesin receptor,	gastrin/cholecysto	cholecystokinin re	gastrin receptor -	sulfakinin recepto	probable chemoattr	gastric CCK-A rece	G protein-coupled	kappa-type opioid	hypothetical prote	cholecystokinin ty	cholecystokinin-A	neurokinin 3 recep	neurokinin 3 recep	cholecystokinin A	neurokinin 3 recep
JH0374	A47430	A42685	832817	JC7809	JC5796	S50150	JC5498	A44081	T27559	JN0692	JC5599	JQ1517	\$55524	151898	A34916
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330.5 16.8	327 16.6	326 16.	326 16.			325 . 16	324.5 16		322 16		321.5 16		320 16		320 1

ALIGNMENTS

RESULT 1 193982 neuropeptide Y/peptide YY receptor Y4 - human C,Species: Homo sapiens (man) C,Species: Homo sapiens (man) C,Species: Homo sapiens (man) C,Species: Homo sapiens (man) C,Accession: 139182 C,Accession: 139182 A,Reference number: 139182; MUD:96070761; PMID:7592911 A,Reference number: 139182; MUD:96070761; PMID:7592911 A,Reference number: 139182 A,Status: preliminary A,Molecule type: DNA A,Residues: 1-375 <res> A,Reference SMBL:U35232; NID:g1063629; PIDN:AAC50280.1; PID:g1063630 C,Rowords: Annerite number: Annerite</res>		1 MNTSHLLALLLPKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNL 60 		61 CLMCVTVROKEKANVTNILIANIAFSDFIMCLICQPITAVYTIMDYWIFGETLCKMSAFI 120		121 ÇCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL 180	181 BNVFHKAHSKALEFLADKNVCTSSWPLAHHRTIYTTFLLLFQYCLFIGFILVCYARIYRR 240	181 ENVFHKAHSKALBFLADKVVCTESWPLAHRTIYTTFLLLFQYCLFLGFILVCYARIYRR 240	241 LQRQGRUFHKGTYSLRAGHMKQUNVVLVVMVVAFAVLMLFLHVFNSLEDWHHEAIPICHG 300	241 LORQGRUFHKGTYSLRAGHMKQVNVVLVVMVVAFAVLMLFLHVFNSLEDWHHEAIPICHG 300	301 NLIFLVCHILAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 360	301 NLIFLVCHLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 360	361 VSKGSLRLSGRSNP1 375	361 VSKGSLRLSGRGNPI 375
RESULT 1 139182 neuropeptide C;Species: F C;Date: 01-N C;Date: 01-N N;Bard, J.A. J.Title: Cl. A;Reference A;Reference A;Residues: A;Residues: A;Residues: A;Residues: C;Superfamil	Query Mast Loc Matches	Vo di	δλ	gg	ò	g	ò	qu	ò	qu	λ ₀	qq	λŏ	qa

RESULT 2

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two different second messenger
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                                                                                                                                                                                                                                                                                                                                              NLIPLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 360
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                                                                                       OCMSVTVSILSLVLVALERHOLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    neuropeptide Y/peptide YY receptor Y1 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 20-Apr-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SETKRINVMLLSIVVAFAVCWLPLTFNTVFDWNHQIIATCNHNLLFLCHLTAMISTC
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                                                                                                                121 QCMSVTVSILSLVLVALERHQLIINPIGWKPSIFQAYLGIVVIWFISCFLSLPFLANSTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28 YNFSEH------CODSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
181 ENVEHKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR
                                                                                                                                                                                                  LOROGRVFHKGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary; not compared with conceptual translation A;Molecule type: nucleic acid A;Residues: 1-382 AERs A;Residues: 1-382 AERs C;Residues: appetite; G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R; Herzog, H.; Hort, Y.J.; Ball, H.J.; Hayes, G.; Shine, J.; Selbie, Proc. Natl. Acad. Sci. U.S.A. 89, 5794-5798, 1992
A;Title: Cloned human neuropeptide Y receptor couples to two differ A;Reference number: A46133; MUID:92335184; FMID:1321422
A;Accession: B46133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
44.2%; Score 869; DB 2; Length 38;
Best Local Similarity 46.8%; Pred. No. 4e-67;
Matches 168; Conservative 74; Mismatches 101; Indels
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LSKGSMRMGSKSN 373
                                                                                                                                                                                                                                                                                                                                                                                                                                   361 VSKGSLRLSGRSN 373
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C;Species: Mus musculus (house mouse)
C;Accession: S6588
R;Gregor, P: Millham, M.L.; Feng, Y.; DeCarr, L.B.; McCaleb, M.L.; Cornfield, L.J.
FBBS Lett. 381, 58-52, 1996
A;Ftle: Cloning and characterization of a novel receptor to pancreatic polypeptide,
A;Reference number: S63685, MUID:96193913; PMID:8641440
                                                                                                              3
                                                                                                K.; Brenner, S.; Collins, F.; Karbon, 1995
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A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-375 < GRE>
A; Residues: 1-375 < GRE>
C; Ctoss-references: EMBL: U40189; NID: 91223969; PIDN: AAC52442.1; PID: 91223970
C; Superfamily: neurokinin 1 receptor
                                                                                                                                                                                                                                                         A;Cross-references: EMBL:U42387; NID:g1314327; PIDN:AAB07759.1; PID:g1314328
C;Superfamily: neurokinin 1 receptor
                         pandreatic polypeptide receptor - human
C;Species: Homo sapiens (man)
C;Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 #text_change 20-Apr-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MNTSHILALLIPKSPQGENRSKPLGTPYNPSEHCQDSVDVMVFIVTSYSIEIVVGVLGNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 LQRQSRVFHKGTYSLRAGHMXQVNVVLVVMVVAFAVLWLPLHVFNSLBDWHHBAIPICHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 QCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 ENVFHKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 CLMCVTVRQKEKANVTNLLIANLAFSDFLMCLJ.CQPLTSVYTIMDYWIFGBTLCKMSAFI
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77.3%; Score 1519; DB 2;
Best Local Similarity 75.9%; Pred. No. 4.8e-123;
Matches 283; Conservative 35; Mismatches 55;
                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                            Score 1962; DB 2;
Pred. No. 3.8e-161;
1; Mismatches 0;
                                                C;Species: Home sapiens (man)
C;Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 #
C;Datession: G02300
R;Yan, H.; Yang, J.; Marasco, J.; Yamaguchi, K.; Bre submitted to the EMBL Data Library, December 1995
A;Reference number: H01018
A;Accession: G02300
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: H01018
A;Residues: 1-375 
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Best Local Similarity 99.7%;
Matches 374; Conservative
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neuropeptide Y/peptide YY receptor YI - African clawed frog
C;Species: Xenopus laevis (African clawed frog)
C;Species: Xenopus laevis (African clawed frog)
C;Date: 2.7-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 20-Apr-2000
C;Accession: S71152; S55924
R;Martens, G.J.; Blomqvist, A.G.; Roubos, E.W.; Larhammar, D.
R;Martens, G.J.; Blomqvist, A.G.; Roubos, E.W.; Larhammar, D.
A;Description: Cloning and sequencing of an neuropeptide Y/peptide YY receptor from Xenop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184 FQN--VTLDAYKDKYVCFDQFPSDSHRLSYTTLLLVLQYFGFLCFIFICYFKIXIRLKRR
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A;Molecule type: mENA
A;Residues: 1-366 <mAR>
A;Cross-references: EMBL:L25416; NID:g409169; PIDN:AAA49918.1; PID:g409170
A;Experimental source: brain, hypothalumus
R;Blomgvist, A.G.; Roubos, E.W.; Larhammar, D.; Martens, G.J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65 VIVROKEKANVINLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFIQCMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             185 HKNHSKALBFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQ
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                                                                                                                                                                                              A;Nore: sequence extracted from NCBI backbone (NCBIN:104735, NCBIP:104736)
C;Genetics: A;Genetics:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 QGENRSKPLGTPYNFSE------HCQDSVDVMVFIVTSYSIETVVGVLGNLCLMC
                                                                                           A;Residues: i-384 <LAR>
A;Cross-references: GB:M88461; NID:g189155; PIDN:AAA73215.1; PID:g189156
A;Experimental source: fetal brain
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44.6%; Pred. No. 4.8e-66;
cive 77; Mismatches 108;
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362 TSLK---QASPV 370
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nes 166; Conservative
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Matches 166;
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R;Larhammar, D.; Blomqvist, A.G.; Yee, F.; Jazin, E.; Yoo, H.; Wahlested, C.
J. Biol. Chem. 267, 10935-10938, 1992
A;Title: Chem. 267, 10935-10938, 1992
A;Title: Cloning and functional expression of a human neuropeptide Y/peptide YY receptor
A;Reference number: A42773; MUID:92283782; PMID:1317848
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A; Residues: 1-384 <HER.
A; Cross-references: GB:LO7615; NID:g189284; PIDN:AAA59947.1; PID:g189285
A; Cross-references: GB:LO7615; NID:g189284; PIDN:AAA59947.1; PID:g189285
A; Notes: sequence extracted from NCBI backbone (NCBIN:128005, NCBIP:128000)
R; Herzog, H.; Hort, Y.J.; Ball, H.J.; Hayes, G.; Shine, J.; Selbie, L.A.
Proc. Natl. Acad. Sci. U.S.A. 89, 5794-5798, 1992
A; Title: Cloned human neuropeptide Y receptor couples to two different second messenger
A; Reference number: A46133; MUID:92335184; PMID:1321422
                                                                                                                                                                                                                                                         delineation of tissue-specific
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Cispecies: Mus musculus (house mouse)
Cispecies: Mus musculus (house mouse)
Cispecies: Mus musculus (house mouse)
Cispecies: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 20-Apr-2000
Cispeciesion: S27388
Ribva, C.; Oberto, A.; Sprengel, R.; Genazzani, E.
FEBS Lett. 314, 285-288, 1992
A;Fitle: The murine NPY-1 receptor gene. Structure and delineation of tissue A;Reference number: S27388
A;Reference number: S27388; MuID:93106169; PMID:1468559
A;Accession: S27388
A;Reference number: Dayanary
A;Residues: 1-382 <EVA>
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A;Residues: 1-384 <HE2>
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46.5%; Pred. No. 6e-67;
tive 75; Mismatches 101; Indels
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Best Local Similarity 46.5%
Matches 167; Conservative
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A;Residues: 1-343, DDYETIAMSTMHTDVSKTSLKQASPVAFKKISMNDNEKI' «KRA»
A;Cross-references: EMBL:Z11504; NID:957636; PIDN:CAA77579.1; PID:957637
C;Superfamily: neurokinin 1 receptor
C;Superfamily: neurokinin 1 receptor
C;Superfamily: neurokinin 1 receptor
C;Superfamily: neurokinin 1 receptor
C;Superfamily: neurokinin 1 receptor
C;Superfamily: neurokinin 1 receptor
C;Superfamily: neurokinin 1 receptor
C;Superfamily: neurokinin 1 receptor
C;Superfamily: neurokinin 1 receptor
C;Superfamily: protein-coupled receptor; glycoptotein; phosphoprotein; transmembrane #status predicted <TM2>
F;73-93/Domain: transmembrane #status predicted <TM3>
F;155-175/Domain: transmembrane #status predicted <TM4>
F;213-231/Domain: transmembrane #status predicted <TM5>
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A;Residues: 1-349 <EVA>
A;Cross-references: EMBL:Z11504
Spirtause, J.; Eva, C.; Seeburg, P.; Sprengel, R.
Shintted to the EMBL Data Library, November 1991
A;Description: Pharmacological and Transduction Properties of a Recombinantly Expressed
                            CDNA
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C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Accession: S12863; S19101
R;Eva, C.; Keinaenen, K.; Monyer, H.; Seeburg, P.; Sprengel, R.
FEBS Lett. 271, 81-84, 1990
A;Fitle: Molecular cloning of a novel G protein-coupled receptor that may belong to A;Reference number: S12863; MUID:91032093; PMID:2172008
lochim. Biophys. Acta 1261, 439-441, 1995
Title: Cloning and sequence analysis of a neuropeptide Y/peptide YY receptor Y1;
Reference number: S55924; MUID:95260870; PMID:7742373
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                                                                                                                                                                                                                                                                     Length 366;
                                                                        A,Accession: S55924
A,Status: preliminary: nucleic acid sequence not shown
A,Molecule type: mRNA
A,Molecule type: mRNA
A,Residues: 1-278,'T',280-366 <BLO>
A,Cross-references: BMB1:L25416; NID:9409169
C,Superfamily: neurokinin I receptor
C,Superfamily: neurokinin I receptor
C,Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                  41.9%; Score 823; DB 2; Length 36
44.4%; Pred. No. 3.5e-63;
tive 71; Mismatches 121; Indels
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les 161; Conservative
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363 SPI 365
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C;Species: Rattus sp. (rat)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 19-May-2000
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 19-May-2000
C;Accession. 152315
R;Welch, S.K.; O'Hara, B.F.; Kilduff, T.S.; Heller, H.C.
Biochem. Biophys. Res. Commun. 209, 606-613, 1995
A;Title: Sequence and tissue distribution of a candidate G-coupled receptor cloned from 1A;Reference number: 152315; MUID:95251659; PMID:7733930
A;Accession: 152315
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YCLPLGFILVCYARIYRRLQRQ---GRVFHKGTYSLRAGHMKQVNVVLVVWVVAFAVLWL
                                                                                                                                                                                                                                                                                                                                                                                                              LLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFIQCMSVTVSILSLVLVAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 LPPGTTGDPDLFSGPSPAGSTPANQSAEASESNVSATVPRAAAVTPFQSLQLVHQLKGLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105 DY-WIFGETLCKMSAFIQCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYS-LR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLIFLVCHLLAMASTC
                                                                                                                                                                                                                                                                                  YNPSEH------CODSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Scatus: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residus: 1-70 cRES-
A;Cross-references: GB-S77867; NID:g998527; PIDN:AAB34129.1; PID:g998528
C;Superfamily: neurokinin 1 receptor
F;262-285/Domain: transmembrane #status predicted <TW6>
F;293-22/Domain: transmembrane #status predicted <TM7-
F;211,12/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;346/Binding site: phosphate (Thr) (covalent) #status predicted
                                                                                                                                                         Length 349;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 370;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                             DB 2;
                                                                                                                                                         41.9%; Score 822.5; DB 2;
llarity 48.5%; Pred. No. 3.6e-63;
Conservative 62; Mismatches 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
24.6%; Score 483; DB 1; I
Best Local Similarity 35.7%; Pred. No. 6.2e-34;
Matches 129; Conservative 59; Mismatches 129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 LPKSPOGE --- NRSKPLG-TPYNFS-EHCQDSVDVMV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   317 UNPFIYGFLNTNFKKEIKALVLTC 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||| ||||| ||| ||::::: | VNPIFYGFLNKNFQRDLQFFFNFC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein-coupled receptor UHR-1 - rat
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Db 234 YLLPLLAILLSYVRVSVKLRNRVVPGSVTQSQADWDRA-RRRRTFCLLVVVVVVFALCWL 292	: : : :
Qy 260 PLHVFNSLEDWHHEAI-PICHGNLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVL 338 [:	OY 212 TIYTTFLLEQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYSLRAGHMKQVNV 265 Dh 217 TVYGISSLILINTPLGTISPSYTRIMSKIKNHVSPGAANDHYHORROKTTK 268
Oy 339 T 339	2.5 VALVAMANABANAMI DI LAVANGI, BINAHHRA I DI CHIMI, TBI VICHI I, AMASHI VICHI, 3.2
Db 352 S 352	**************************************
RESULT 10 139187 neuropeptide Y/peptide YY receptor Y2 - human N/Alternate names: neuropeptide y/peptide YY receptor type 2	QY 326 NTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTEVSKGSLRLSGRSNP 374 : :
C,Species: Homo sapiens (man) C;Date: 01-Mar-1996 #sequence_revision 01-Mar-1996 #text_change 20-Apr-2000	RESULT 11
C:ACCEBELON: 139187, 139183; GUZ301 R:Gerald, C.; Walker, M.W.: 7Vayls869, P.J. J. Biol. Chem. 270, 26788-2661, 1995 A;Title: Expression cloning and pharmacological characterization of a human hippocampal	procesticoid-induced receptor precursor, short form RP23 - mouse C;Species: Mus musculus (house mouse) C;Date: 14-Feb-1992 #sequence_revision 14-Feb-1992 #text_change 20-Apr-2000
A, Reference number: 139187; MUID:96070760; PMID:7592910 A, Accession: 139187 A, Statemary A, Statemary A, Molecula trace mPNB	C;Accession: B404/0 R;Harrigan, M.T.; Campbell, N.F.; Bourgeois, S. Mol. Endocrinol. 5, 1331-1338, 1991 A:Title: Identification of a gene induced by glucocorticoids in murine T-cells: a pote
	MID:1663214
R;Rose, P.M.; Fernandes, P.; Lynch, J.S.; Frazier, S.T.; Fisher, S.M.; Kodukula, K.; Kie J. Biol. Chem. 270, 22661-22664, 1995	A;Status: preliminary A;Molecule type: mRNA
A,Title: Cloning and functional expression of a cDNA encoding a human type 2 neuropeptid A; Reference number: 139163; MUID:96032678; PMID:7559383 A: Accession: 139163	A;Residuse: 1-423 <hax> A;Ross=references: GB:M80481; GB:M80610; NID:g193516; PIDN:AAA17882.1; PID:g460318 C;Superfamily: neurokinin 1 receptor</hax>
A; Status: preliminary; translated from GB/EMBL/DDBJ A; Molecule type: mRNA	Query Match 21.9%; Score 430; DB 2; Length 423;
A;Residues: 1-133,'A',135-381 <ros> A;Cross-references: BMB1:U32500, NID:g1000750; PIDN:AAA93170.1; PID:g1000751 A;Cross-references: BMB1:U32500, NID:g1000750; PIDN:AAA93170.1; PID:g1000751</ros>	No. 2.6 matches
, 1001	Qy 17 GENRSKPLGTPYNFSEHCQDSVDWNVFIVTSYSIETVVGVLGNLCLMC 64
A; Accession: 602301 A; Status: preliminary; translated from GB/EMBL/DDBJ	36 GPNASSHFWANTTFSD-WQNFVGRRRYGAESQNPTVKALLIVAYSFTIVFSLFGNVLVCH 94
A;Molecule type: mRNA A;Residues: 1-171, 'G',173,'R',175-201,'P',203-208,'A',210-381 <yan> A;Cross-references: EMB::U42889; NID:q1314339; PIDN:AAB07760.1; PID:q1314330</yan>	CY 65 VTVRQXEKANYTNILIANIAFSDFLACLICOPLIAVYTINDYWIEGETLCKM5FTOCKNS 124 D 95 VIFKORPRHSATSLFIVNLAVADIMILLANFFTILVRFVNSTWFGXGMCHVSRFAQYCS 154
C;Genetics: A;Gene GBS:NPV26 A;Gene GBS:	
A; COSS-telefences: GDS:303007; Only:1020%2 A; Map position: 4431-4431 C:Smoerfamily: neurokinin 1 receptor	Db 155 LHVSALTLTAIAVDKHQVINHPLKPRISITKGVIYIAVIWWATFFSLPHAICCKLF 211
C; Keywords: appetite; G protein-coupled receptor; glycoprotein; lipoprotein; thiolester F: 97-76/Domain: transmembrane #status predicted (TMI) - F: 97-76/Domain: transmembrane #status predicted (TMI)	QY 185 HKWHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR 240 11
F;0/ 113/Jonall: Lamsmembrane #status predicted <tm4> F;166-186/Domain: transmembrane #status predicted <tm4> F;21-237/Jonain: transmembrane #status predicted <tm5></tm5></tm4></tm4>	241 LOROGRVFHKGTYSLRAGHMKOVNV-VLVVVVVAFAVLWLPLHVFNSLEDWHHEAIP 29
F;269-291/Domain: transmembrane #status predicted <tm6> F;305-328/Domain: transmembrane #status predicted <tm7></tm7></tm6>	266 LWLCNTIGDVTTEQYLALRRKKKTTVKMLVLVVVLFALCWFFLNCYVLLLSSKA 3
F;123-203 Disulfide Donds: #Status predicted F;342/Binding site: palmitate (Cys) (covalent) #status predicted F;372/Binding site: carbohydrate (An) (covalent) #status predicted	297 ICHGNLIFLVCHLLAMASTCVNPPIYGELNTNFKKEIXALVLTCQQSAPLEESEHLP
Query Match 23.8%; Score 468; DB 2; Length 381; Best Local Similarity 32.5%; Pred. No. 1.2e-32;	Db 320 IHTNNALYFAFHWFAMSSTCYNPFIYCWLNBNFRVELKALLSMCOR-PPKPQEDRLFSPV 378 Qy 354LSTVHTEVSKG 364
Matches 115; Conservative 66; Mismatches 127; Indels 46; Gaps	Db 379 PSFRVAWTEKSHG 391
OY 38 VDWNPIVTSYSIETVOKOLGNICHOOTVROKEKANVINLLIANLAFSENGCLICOPL 97 13	RESULT 12
OY 98 TAVYTIMDYWIPGETLCKMSAFIQCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAY 157	glucocotticoid-induced receptor, long form RP105 - mouse Coperies: Mus musculius (house mouse)
Db 107 TLTYTLMGEWRAGPVLCHLVPYAQGLAVQVSTITLTVIALDRHRCIVYHLESKISKRISF 166	Ω
QY 158 LGIVLIWVIACVLSLPFLANSILENVFHKNHSKALEFLADKVVCTESWPLAHHR 211	R; Harrigan, M.T.; Campbell, N.F.; Bourgeois, S.

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DD 83 LSDFFVCIVTAP-TTLYTVLYMFWFFSRTLCKIAGSLQGFNIFLSTFSIASIAVDRYVLI 141 QY 144 INPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSILENVFHKNHSKALEFLADKVVC 201 142 IFFTKRERQQNLSFCFFIMIWVISLILAVFLLQASDLTPVFVEPSCDLALYIC 194 QY 202TESW-PLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLORGGRVFHKG 251 DD 195 HEQNEIWERMISKGTYTLAVLITQYAFPLFSLVFAYSRIAHRWKLRFANRNQNVTTNTN 254 QY 252 TYSLRAGHMKQVNVULVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLIFL 305 DD 255 TSGRRSVVERQRRTHLLLVCVVAVFAVAWLPLNHVFNSLEDWHHEAIPICHGNLIFL 305 QY 306 VCHLLAMASTCVNPFIYGFLATNFKKEIKAL 336 QY 306 VCHLLAMASTCVNPFIYGFLATNFKKEIKAL 336 CHT. AMASTCVNPFIYGFLATNFKKEIKAL 336	SULT 14 Outcoorticoid-induced receptor, long form RPB Dactes: Mus musculus (house mouse) Date: 14-Feb-1992 #sequence_revision 14-Feb- Accession: Campbell, N.F.; Bourgeois, S IT: Endocrinol. 5, 1331-1338, 1991 IT: Endocrinol. 5, 1331-1338, 1991 IT: Endocrinol. 5, 1331-1338, 1991 IT: Endocrinol. 5, 1331-1338, 1991 IT: Endocrinol. 5, 1331-1338, 1991 IT: Endocrinol. 5, 1331-1338, 1991 IT: Endocrinol. 6 a gene induced by g Reference number: A40470; MuID:92123228; PMI Accession: G40470 Status: preliminary Residues: 1-491 cHRA> Cross references: GB:M80610 Status: preliminary Residues: 1-491 cHRA> Cross references: GB:M80610 Superfamily: neurokinin 1 receptor Cuery Match Residues: 124; Conservative 66; Mismatche IT GENRSKPLGTPRNFSEHCQDSV	
Mol. Endocrinol. 5, 1331-1338, 1991 AyTitle: Identification of a gene induced by glucocorticoids in murine T-cells: a potent AyAcession: D40470 AyAcession: D40470 AyAcession: D40470 AyAcession: D40470 AyEstus: preliminary AyOlecule type: mRNA AyEssidus: 1-443 <aar> AyEross references: GB:W80160 C,Superfamily: neurokinin 1 receptor Query Match Best Local Similarity 30.9%; Score 410; DB 2; Length 443; Best Local Similarity 30.9%; Pred. No. 1.4e-27; Matches 121; Conservative 68; Mismatches 142; Indels 62; Gaps 13; Ay I7 GENRSKPLGTPVNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNLCLMC 64 D4</aar>	65 VTROCERANTELLINIANDAENDELLICOPLIANTINDELLINIANDAENDELL	

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281 LHVFNSLEDWHH-EAIPICHGN-----LIFLVCHLLAMASTCVNPFIYGFLNTNFKKE 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64 FILNLAASDCWACILSLPITFITHTNVYKNWYFGNLLCHLIPCIQGISIFVCTFSLGAIALD 123
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     173 ICGYPCTEKWESAKSRRAYTMIVWLAQFVVPFAVMAFCYANIVSVLSKRAQTKIRKMVER 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ------HMKOVNVVLVVMVVAFAVLWLP 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         293 HAVISLIIEYDDTQSFPRLYGRDDYDISYLLNLFTHSIAMSNNVLNPVLYAWLNPSFRQ- 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        79 LIANLAFSDFLMCLLCOPLTAVYTIMDYWIFGETLCKWSAFIQCMSVTVSILSLVLVALE 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSILENVFHKNHSKALFFLADK 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29 NFSEHCQ------DSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTNL 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cipate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 20-Apr-2000 Cipate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 20-Apr-2000 Cipate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 20-Apr-2000 Cipate: 15-Oct-1999 #sequence of Cipate: 1996 Aibert of the EMBL Data Library, February 1996 Aibert of the EMBL Data Library, February 1996 Aibert of number: 220676 Aibert of number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aibert of Number: 220676 Aib
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Gene: CESP:C39E6.6
A;Introne: 58/3; 107/1; 169/3; 253/3; 274/2; 329/2; 366/2; 438/2
C;Superfamily: neurokinin 1 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             333 IKALVLTCQQSAPLEESEHLPLSTVH-TEVSKGSLRLSGRS 372
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ypothetical protein C39E6.6 - Caenorhabditis elegans ; Species: Caenorhabditis elegans
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Job time: 23 secs
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Best Local Similarity 25.9%
Matches 104; Conservative
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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17 01-WAY-1999 (TrEMBLrel. 10, Last sequence update)

18 01-WAY-1999 (TrEMBLrel. 14, Last annotation update)

18 01-WAY-1999 (TrEMBLrel. 14, Last annotation update)

18 01-WAY-1999 (TrEMBLrel. 14, Last annotation update)

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26 01-WAY-1999 (TrEMBLRel. 14, Last annotation update)

27 01-WAY-1999 (TrEMBLREL. 15, Last annotation update)

28 01-WAY-1999 (TrEMBLREL. 15, Last annotation update)

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                                                                                                    Gaps
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Regul. Pept. 75:29-37(1998).
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01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Pancreatic polypeptide receptor Y4.
Cavia porceallus (Guinea pig).
Bukaryota, Metacoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia; Butheria; Rodentia; Hystricognathi; Caviidae, Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE=99017377; PubMed=9802391;
Eriksson H., Berglund M.M., Holmberg S.K., Kahl U., Gehlert D.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sharmar P.S., Hollberg S.K., Eriksson H., Beck-Sickinger A.G., Grundemar L., Larhammar D.; Grundemar L., Larhammar D.; Bubmitted (JUW-1998) to the EMBL/GenBank/DDBJ databases.
EMBL, AF072822, AAD13144.1, -
GO; GO:0016021; C:integral to membrane; IEA.
GO; GO:0004851; F:receptor activity; IEA.
GO; GO:0001864; F:receptor activity; IEA.
GO; GO:0001869; P:G-protein coupled receptor protein signalin. InterFro; IFR000276; GPCR_Rhodpsn. Ike receptor protein signalin. PF00001; 7tm 1; 1. PRINTS; PR00237; GFCRRHODPSN.
PROSITE; PS00237; GFORRHODPSN.
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                                                                           Length 375;
                                                                        89.4%; Score 1756; DB 6; Length 3
85.9%; Pred. No. 9.1e-157;
Live 29; Mismatches 24; Indels
                                                 42346 MW; 5992F075904DB1A0 CRC64;
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PRINTS; PR00237; GPCRRHODOPSN.
PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; 1.
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
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                                                                                       Best Local Similarity 85.9%
Matches 322; Conservative
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                                      Neuropeptide, Receptor
SEQUENCE 375 AA, 42
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C STRAIN-CSTBL/G1 TISSUE-Urinary bladder;
X MEDLINE-22354683; Pubmed=12466851;
A The FANTOM Consortium,
A the RIKEN Genome Exploration Research Group Phase I & II Team;
A the RIKEN Genome Exploration Research Group Phase I & II Team;
I Malus 420:563-573 (2002).
I Nature 420:563-573 (2002).
I Mature 420:563-573 (2002).
R MGD; MGI:105374; Ppyr1.
R MGD; MGI:105374; Ppyr1.
R GO; GO:001602; F:pancreatic polypeptide receptor activity; IDA.
R GO; GO:001602; F:pancreatic polypeptide receptor activity; IDA.
R InterPro; IPR0003275; Rumarate lyase.
R InterPro; IPR0003275; GPCR-Rhodpsn.
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                                                                                                                                                                                                                                                                        1 MDISPPLASILPIYPQEENSSKPQRLLFNFSDHCQDSGDLMGFIVISYGIETIVGVLGNL
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                               Query Match 83.1%; Score 1633.5; DB 11; Length 372; Best Local Similarity 82.9%; Pred. No. 3e-145; Matches 311; Conservative 22; Mismatches 39; Indels 3;
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PROSITE; PS00183; PUMARATE LYASES; 1. PROSITE; PS00237; G PROTEIN RECEP F1 1; 1. PROSITE; PS50262; G PROTEIN RECEP F1 2; 1. SEQUENCE 375 AA; 42657 WW; 638EBĀ110E7F7A53 CRC64;
                                                            41774 MW; SB6CF78FBB213374 CRC64;
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Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           375 AA
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAR-2003 (TrEMBLrel. 23, Cres
01-MAR-2003 (TrEMBLrel. 23, Last
01-CCT-2003 (TrEMBLrel. 25, Last
Neuropeptide Y receptor type 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361 VSKGSLRLSGRSNPI 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     358 VSKGFLPLGGRSNPI 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                            372 AA;
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77.2%; Score 1517; DB 11; Length 375;

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QCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL 180
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                                                                                                                                                                                                                                                                                                                                                                                                      317 NPVIYGFLNSNFKKEVKSLILSCOHNSVTASIEDYDHLPLSTMOTEVSKGSLSLNCRHNS 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 CLMCVTVROKEKANVTNLLIANLAFSDFLMCLLCOPLTAVYTIMDYWIFGETLCKMSAFI 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       45 CLVVVITRQKEMRNVTNIFIVNLSCSDILVCLVCLPVTIIYTLMDRWILGEALCKVTPFV 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bubtype in the zebrafish.";

BNA Cell Biol. 0.0-0(1997).

EMBL; AR094616.1;

ZFIN; ZDB-GENE-980526-208; npyryb.

GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:004872; F:receptor activity; IEA.

GO; GO:0001584; F:rhodopsin-like receptor activity; IEA.

GO; GO:000186; P:G-protein coupled receptor protein signalin. .; IEA.

InterPro; IRR000276; GPCR_Rhodopsn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Cloning and characterization of a novel neuropeptide Y (NPY) receptor
                                                                                        ERHOLIINPIGWKPSISQAYLGIVLIWVIACVLSLPFLANSILENVFHKNHSKALEFLAD
                                                                                                                    137 ERHQLIINPIGWRPSISQAYLGIGVIWTLACLMSLPFILTSILSNDLYEQLSHIMNFSYD
                                                                                                                                                                                                               197 KAICIDSWPSEQHRLIYTTLLLLQYCIPLFFIILCYLRIYLRLQKRKDMFEKSEYSNRA
                                                                                                                                                                                                                                                                                                             257 VQLRRINILLASMVAAFAVCWLPLHVFNTIVDWNYKIISPCHHNLIFSLCHLVAMASTCV
                                                                                                                                                                                                                                                                                                                                                                             318 NPFIYGFLNTNFKKEIKALVLTCQQ----SAPLEESEHLPLSTVHTEVSKGSLRLSGRSNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MNTSHLLALLLPKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNL
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                                                                                                                                                                                   198 KVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYSLRA
                                                                                                                                                                                                                                                                                 258 GHMKQVNVVLVVMVVAFAVLMLPLHVFNSLEDWHHEAIPICHGNLIFLVCHLLAMASTCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Brachydanio rerio (Zebrafish) (Danio rerio).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
Lundell I., Berglund M.M., Starback P., Salaneck S., Gehlert D.R.
Larhammar D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     375 AA; 42116 MW; 4B0C9551131A14D1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OS7463 PRELIMINARY, PRT, 375 AA.
057463;
01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-2098 (TrEMBLrel. 06, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Neuropeptide Y /peptide Yr receptor Yb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48.9%; Score 960; DB 13; 50.1%; pred. No. 6.5e-82; ive 57; Mismatches 112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00001; 7tm 1; 1.
PRINTS; PR00237; GPCRRHODOPSN.
PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; 1.
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
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Matches 188; Conservative
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SEQUENCE
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13 Lindell I., Boswell T., Larhammar D.;

14 Chicken Neuropeptide Y Family Receptor With Equal

15 Chicken Neuropeptide, Neuropeptide Y and Peptide YY.";

16 Chicken Neuropeptide, Neuropeptide Y and Peptide YY.";

17 Affinity for Pancreatic Polypeptide, Neuropeptide Y and Peptide YY.";

18 Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.

18 EMBL, AF410853; AALB4161.1;

19 CGO (0016021; C:Integral to membrane; IEA.

19 CGO (0016021; C:Integral to membrane; IEA.

10 CGO (0016021; C:Integral to membrane; IEA.

10 CGO (0016021; C:Integral to membrane; IEA.

10 CGO (0016021; C:Integral to membrane; IEA.

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10 CGO (0016021; C:Integral to membrane; IEA.

11 CGO (0016021; C:Integral to membrane; IEA.

11 CGO (0016021; C:Integral to membrane; IEA.

12 CGO (0016021; C:Integral to membrane; IEA.

13 CGO (0016021; C:Integral to membrane; IEA.

14 CGO (0016021; C:Integral to membrane; IEA.

15 CGO (0016021; C:Integral to membrane; IEA.

16 CGO (0016021; C:Integral to membrane; IEA.

17 CGO (0016021; C:Integral to membrane; IEA.

18 CGO (0016021; C:Integral to membrane; IEA.

18 CGO (0016021; C:Integral to membrane; IEA.

18 CGO (0016021; C:Integral to membrane; IEA.

18 CGO (0016021; C:Integral to membrane; IEA.

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18 CGO (0016021; C:Integral to membrane; IEA.

19 CGO (0016021; C:Integral to membrane; IEA.

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10 CGO (0016021; C:Integral to membrane; IEA.

10 CGO (0016021; C:Integral to membrane; IEA.

11 CGO (0016021; C:Integral to membrane; IEA.

11 CGO (0016021; C:Integral to membrane; IEA.

11 CGO (0016021; C:Integral to membrane; IEA.

11 CGO (0016021; C:Integral to membrane; IEA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFIQCMSVTVSILSLVLVAL 137
                                                                                                                                                                                                                                                                                 QCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NLIFLVCHLLAMASTCVNPFIYGFLNTNPKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 360
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                                                                                                                                                                                                                                                                                                           CLMCVTVRQKEKANVTNLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFI
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                                                                                                                                                                                                                                                                                                                                                                                                                          181 NDLFHYNHSKVVEFLEDKVVCFVSWSSDHHRLIYTTFLLLFQYCIFLAFILVCYIRIYHR
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                                                                                        1 MNTSHLLALLLPKSPQGENRSKPLGTPYNFSBHCQDSVDVMVFIVTSYSIBTVVGVLGNL
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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                                           ö
                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42972 MW; C9EC6C00DBFD1F9E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Neuropeptide Y receptor 4.
                 Pred. No. 2.7e-134;
; Mismatches 56;
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75.6%; Pic.
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LSKGSMRMGSKSN 373
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                                             282; Conservative
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                    Similarity
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                    Local
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QBQGM3;
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Best Local Similarity 51.3%
Matches 178; Conservative
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                                                                                                                                        241 LORQGRVFH--KGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPIC 298
                                                                                                                                                                                                 299 HGNLIFLVCHLLAMASTCVNPFIYGFLNTNFKKBIKALVLTCQQSAPLEESEHLPLSTVH 358
QCMSVTVSIPSMVLIALERHQLIIHPTGWKPVVRHSYLAVAVIWIIACFISLPFLSFNIL 164
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                                                                           165 TNSPFHNLSLPFNPFSDHFICIEQWPSEGNRLTYTTLLLCOYCLPLALILVCYFRIFLR
                                     181 ENVEHKAHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bukaryota; Metazoa; Chordata; Verniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=98068842; PubMed=9407007;
Lundell I., Berglund M.M., Starback P., Salaneck E., Gehlert D.R.,
Larhammar D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      characterization of a novel neuropeptide Y receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 13; Length 373;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS, PRO0237, GPCRRHODOPSN.
PROSITE, PS00237, GPROTEIN RECEP F1 1; 1.
PROSITE, PS00202, G_PROTEIN RECEP F1 2; 1.
PROSITE, PS50202, G_PROTEIN_RECEP_T2; 1.
SECUENCE COUDIEd receptor; Receptor; Transmembrane.
SEQUENCE 373 AA, 41673 MW, 217DA7F51A940CFD CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-AUG-1998 (TrEMBLrel. 07, Created)
01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
01-AUG-1998 (TrEMBLrel. 24, Last annotation update)
Neuropeptide Y/Peptide YY receptor Yc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48.4%; Score 950.5; DB 13; 53.6%; Pred. No. 5e-81; iive 60; Mismatches 94;
                                                                                                                                                                                                                                                                                                                                                                                                                    373 AA
                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
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DNA Cell Biol. 16:1357-1363(1997)
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TGITKGSILSNGSAS 359
                                                                                                                                                                                                                                                                             TEVSKGSLRLSGRSN 373
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es 181; Conserv
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  105
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               147
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MEDLINE-99017378; Pubmed-9802392;

MEDLINE-99017378; Pubmed-9802392;

MEDLINE-99017378; Pubmed-9802392;

MEDLINE-99017378; Pubmed-9802392;

Todithy of a neuropeptide Y/peptide YY receptor from the Atlantic

Todithy bept. 75:99-43 (1998).

TODITHY BELONGS TO FAMILY 1 OF G-PROTEIN (BY SIMILARITY).

TODITHY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.

MEDL, PARO73925; AAD02333.1; -

COCO0016821; C:integral to membrane; IEA.

GO; GO:000188; F:receptor activity; IEA.

GO; GO:000188; F:receptor activity; IEA.

GO; GO:000188; P:receptor activity; IEA.

GO; GO:000188; P:receptor activity; IEA.

RO; GO:000188; P:receptor activity; IEA.

RO; GO:000188; P:receptor activity; IEA.

RO; GO:000188; P:receptor activity; IEA.

RO; GO:000188; P:receptor activity; IEA.

RO; GO:000188; P:receptor activity; IEA.

RO; GO:000188; P:receptor activity; IEA.

PROSITE; PRO00237; GPROTEIN RECEP_FI_1; I.

PROSITE; PRO00237; GPROTEIN RECEP_FI_1; I.

PROSITE; PROO0237; GPROTEIN RECEP_FI_1; I.

PROSITE; PROOFES GREATEN RECEPERITE.

SOR G-protein coupled receptor; Transmembrane.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EHCQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTNLLIANLAFSDFLMC
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152 SISOAYLGIVLIWVIACVLSLPFLANSILENVFHXNHSKALBFLA-DKVVCTESWPLAHH
                                                                                                         PSISQAYLGIVLIWVIACVLSLPFLANSILENVFHKNHSKALEFLADKVVCTESWPLAHH
                                                                                                                                                 211 RTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYS--LRAGHMKQVNVVLV
                                                                                                                                                                                                                                                                                       RTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYSLRAGHMK---QVNVVL
                                                                                                                                                                                                                                                                                                                                                                              269 VMVVAFAVLMLPLHVFNSLEDWHHBAIPICHGNLIFLVCHLLAMASTCVNPFIYGFLNTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dedus morhua (Atlantic cod).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Paracanthopterygii; Gadiformes; Gadidae; Gadus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46.9%; Score 922; DB 13; Length 374; 51.3%; Pred. No. 2.4e-78; ive 62; Mismatches 95; Indels 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    329 FKKEIKALVLTCQQSAPLEES-EHLPLSTVHTEVSKGS 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-UNA-1999 (TREMBLrel. 24, Last annotation update)
Neuropeptide Y/peptide YY receptor Yb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320 POKELKATLORCNCGWGVPETYESFPLSTVATDVSKVS 357
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95 CLPFTVVYTLMDHWIFGALLCRLMPFVQCVSVTVSVLSLVLIALERHQLILHPSGWKPSV 154
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127
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                                                                                                                                                                                                                                                                                                                                   268 NVMLATLVAAFAVCWLPLNAFNVVADCDQEVLPVCNHNLLFSLCHLLAMSSTCVNPIIYG
                                                                                                                     155 PQAYIAVLIVWLLACVTSLPFLA------FHLLTSEPYSLFPAPLSQLQVCLEVWPSQD
                                                                                                                                                                                          210 HRIIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVF-----HKGTYSLRAGHMKQV
                                                                                                                                                                                                                                                                                                    264 NVVLVVMVVAPAVLWLPLHVFNSLEDWHHEAIPICHGNLIFLVCHLLAMASTCVNPFIYG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68 NLAFSDMLVGLVCLPLTIAYTLMDHWIFGEALCKGSPFLQCSAVSVSIFSLVLIAIERHQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               202 TESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVF----HKGTYSLRA
                                                                                                                                                                                                                                                208 HKLAYTTSLILFQYCCPLLLMLCYLRIFLRLQRRERMLERQCSRNREDEHRRVMHSKRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29 NFSE-----HCQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTNLLIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Hyperoartia,
Petromyzontiformes, Petromyzontidae, Lampetra.
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                                                                                                                                                                                                                                                                                                                                                                                                              372
                                                                                                                                                                                                                                                                                                                                                                                                                                           328 FLNSNFRKDVASVVLHC-HFQPLEDSYEHFPMSTMNTDVSRTSFRLRNNS 376
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                                                                                                                                                                                                                                                                                                                                                                                                              324 FLNTNFKKEIKALVLTCQQSAPLEES-EHLPLSTVHTEVSKGSLRLSGRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
45.3%; Score 890.5; DB 13; Length
Best Local Similarity 48.3%; Pred. No. 2.2e-75;
Matches 172; Conservative 67; Mismatches 106; Indels
                                                                                     SOAYLGIVLIWVIACVLSLPFLANSILENVFHKNHSKALEF----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-WAR-2002 (TrEMBLrel. 20, Created)
01-WAR-2002 (TrEMBLrel. 20, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=7748;
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206 RLAYTTSLLVFQYFLDLGLIAACYLSIFLRRRRDMVERARDSSRDNRAKGSRRINVML 265
                                                                                                                  266 GSIVALPAVCWLPINIFNIVFDWHHELMVSCQHNLIFSVCHLVAMASTCVNPVVYGFLNS 325
                                                                                     327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94 CQPLTAVYTIMDYWIFGETLCKMSAFIQCMSVTVSILSLVLVALERHQLIINPTGWKPSI 153
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Kraith A., Soderberg C., Postlethwait J.H., Larhammar D.;

"Neuropetide Y receptor subtype with unique properties cloned in the rebrafish: the Zia receptor subtype with unique properties cloned in the Brain Res. Mol. Brain Res. 70:242-252(1999).

EmbL, Apt03400; AaC41276.1;

EmbL, Apt03400; AaC41276.1;

EMBL, SDB-GENE-980526-393; mpyrya.

GO; GO:0016021; Cintegral to membrane; IEA.

GO; GO:0004872; Fireceptor activity; IEA.

GO; GO:0001584; Fireceptor activity; IEA.

GO; GO:0001186; Fireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.

RO; GO:0001186; Pireceptor activity; IEA.
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                                                                             268 VVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLIFLVCHLLAMASTCVNPFIYGFLNT
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                                                                                                                                                                                                                                                                                                                                                                                                                      01-AUG-1998 (TrEMBLrel. 07, Created)
01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
01-AUG-1998 (TrEMBLrel. 24, Last annotation update)
Neuropeptide Y/peptide YY receptor Ya.
NPYRYA OR NPYRYA.
Brachydanio rerio (Zebrafish) (Danio rerio).
Brachydanio serio (Zebrafish) (Tremiata, Vertebrata, Euteleostomi, Actinopterygii, Neopterygii, Teleostei, Ostariophysi; Cypriniformes, Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lundell I., Berglund M.M., Starback P., Salaneck E., Gehlert D.R., Larhammar D.; "Cloning and characterization of a novel neuropeptide Y receptor
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49.1%; Pred. No. 1e-77;
ive 70; Mismatches 89; Indels 19;
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DNA Cell Biol. 16:1357-1363(1997).
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MEDLINE=98068842; Pubmed=9407007;
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SEQUENCE FROM N.A.
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                 248 SHMKKINMMLVAIVAGFAICWLPLYTFNAVSDWNPTLLLHCQHDLIFSLCHLTAMLSICI 307
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    110 GETLCKMSAFIQCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACV 169
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       GHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLIFLVCHLLAMASTCV
                                                                                                                                                                                                                                                                                                                                                                                                                  ------EHCQDSVDVMVFIVTSYS
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                                                 01-00%-2002 (TrEMBLrel. 21, Created)
01-00%-2002 (TrEMBLrel. 21, Last sequence update)
01-00%-2003 (TrEMBLrel. 24, Last annotation update)
Neuropeptide Y receptor Yl.
Gallus gallus (Chicken).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                       318 NPFIYGFLNTNPKKEIKALVLTCQQSAPLEESEHLPLSTVHTEVSKGSLRLSGRSN 373
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43.7%; Score 859.5; DB 13; Length 385;
Best Local Similarity 44.5%; Pred. No. 1.9e-72;
Matches 173; Conservative 74; Mismatches 111; Indels 31;
                                                                                                  385 A.A.
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                                                                                                  PRT;
                                                                                                  PRELIMINARY;
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NCBI_TaxID=9031;
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MEDLINE=21184974; PubMed=11287088;
Gehlert D.R., Vang P., George C., Wang Y., Schober D.,
George C., Wang Y., Schober D.,
Gackenheimer S., Johnson D., Beavers L.S., Gadski R.A., Baez M.;
"Cloning and characterization of Rheaus monkey neuropeptide Y receptor subtypes(1).";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | | | | | : : : : : : | | | | | | : : : | OVENHS ----VHSNFSEXNAQLLAFENDDCHLPLAMIFTLALAYGAVIILGVSGNLALII
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2003 (TrEMBLrel. 16, Last annotation update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Neuropeptide Y receptor Yl.
Macaca mulatta (Rhesus macaque).
Eukarycia / Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Cercopithecides;
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PROSITE; PS00237; GPROTEIN RECEP F1 1; 1.
PROSITE; PS0262; GPROTEIN RECEP F1 2; 1.
PROSITE; PS0262; GPROTEIN RECEP F1 2; 1.
SEQUENCE 383 A4; 44306 WW; F872C45AA90DP62A CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44.6%; Pred. No. ...
tive 77; Mismatches 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          43.6%; Score 856.5; DB 6
44.6%; Pred. No. 3.6e-72;
                                                                                                                                                                                                                                                                                                                            383 AA
347 EESEHLPLSTVHTEVSKGSLRLSGRSNPI 375
                                             PRT;
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TSLK---QASPV 370
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                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
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NCBI_TaxID=9544;
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Best Local Similarity 26.7%
Matches 115; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80 IANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFIQCMSVTVSILSLVLVALER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Archosauria, Aves, Neognathae, Galliformes, Phasianidae, Phasianinae,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.

Matsumoto M., Nomura T., Momose K., Ikeda Y., Kondou Y., Akiho H.,

Togami J., Kimura Y., Okada M., Yamaguchi T.;

Togami J., Kimura Y., Okada M., Yamaguchi T.;

Tinactivation of a novel neuropeptide Y/peptide YY receptor gene in

primate species ";

J. Biol. Chem. 271:27217-27220(1996).

Biol. Chem. 271:27217-27220(1996).

Genew, HGNC:79953) NPV8:

Go, GO:0005887; C:integral to plasma membrane; TAS.

GO, GO:0005887; C:integral to plasma membrane; TAS.

InterPro: IPRO00276; God.

InterPro: IPRO002776; God.

InterPro: IPRO002776; God.

InterPro: IPRO0001; 7tm 1: 1.
                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29.2%; Score 573; DB 4; Length 290; 40.5%; Pred. No. 1.2e-45; Live 65; Mismatches 89; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS; PR00237; GPCRHODOPSN.
PROSITE; PS00237; G-PROTEIN RECEP_F1_1; 1.
PROSITE; PS50262; G-PROTEIN RECEP_F1_2; 1.
SEQUENCE 290 AA; 33180 NW; 3ECCDD87001CA8DB CRC64;
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Last sequence update)
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                                                                                                PRT;
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01-UTN-2002 (TrEMBLrel. 21,
01-UTN-2003 (TrEMBLrel. 24,
Neuropeptide Y receptor Y5.
Gallus gallus (Chicken).
                                                                                                                                                         01-MAY-1997 (TrEMBLrel. 03, 01-MAY-1997 (TrEMBLrel. 03, 01-JUN-2003 (TrEMBLrel. 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human)
                                                                                                                                                                                                                                                                6 encoding protein.
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nes 106; Conserv
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SEQUENCE FROM N.A.
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NCBI_TaxID=9031;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               372 LVFGFSWMPLHLFHIVTDFNATLISNRHFKLVYCICHLLGMMSCCLNPILXGFLNNSIKA 431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9 LAFSDILVVLFCSPFTLTSVLLDRMMFGTVMCHIMPFLQCTSVLVSTLMLISIAAVRYRM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     192 LLCIESWPSDSYRIAPTISLLLMOYILPLVCLTASHTSVCRSVGSRLSSKEGKFOENEMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   252 NLTLHPSKSAGTEAQPSSHTSWSCALVRKHHRRYSKKTSTVMPAILRQQQDADFRDLPET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----GTYSLRAGH------MKQVNVV---------
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199 VVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYR----RLQRQGRVFHK---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
MEDLINE=22060921; PubMed=12065655;
Adluberg S.K.S., Mikko S., Boswell T., Zoorob R., Larhammar D.;
Holmberg S.K.S., Mikko S., Boswell T., Zoorob R., Larhammar D.;
T receptors Yl and YS.,;
J. Neurochem. 81:462-471(2002).

I. J. Neurochem. 81:462-471(2002).

R GO; GO:0016021; C:integral to membrane; IEA.

R GO; GO:0001684; P:receptor activity; IEA.

R GO; GO:0001864; P:receptor activity; IEA.

R GO; GO:000186; P:G-protein coupled receptor protein signalin...;
R InterPro; IRRO0276; GPCR_Rhodpsn.

R Pfam; PF00001; 7tm 1; 1.
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                24.8%; Score 487; DB 13; Length 443;
26.7%; Pred. No. 2.3e-37;
.ive 69; Mismatches 124; Indels 122;
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STRAIN=C57BL/6J; TISSUE=Hippocampus;
MEDLINE=22354663; PubMed=12466851;
The FANTOM Consortium,
the RIKEN Genome Exploration Research Group Phase I & II Team;
                                                                                                                                                                                                                                                                                                                                                                    443 AA; 50044 MW; EFE9F1A391CC092E CRC64;
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01-MRR-2003 (TrEMBLrel. 23, Created)
01-MRR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Neuropeptide Y receptor type 2.
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InterPro; IPR001220; Lectin_legB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 188 HSKALEFLADKVVCTESWP---LAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQ 244
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           70
of the mouse transcriptome based on functional annotation of 11-length cDNAs.",
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80 SMRTVTNFFIANLAVADLLVNTLCLPFTLTYTLMGEWKMGPVLCHLVPYAQGLAVQVSTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    250 VSPGAASDHYHORRH--KMTKMLVCVVVVPAVSWLPLHAFQLAVDIDSHVLDLKEYKLIF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71 EKANVTNILIANLAFSDFIMCLICOPLTAVYTIMDYWIFGETLCKMSAFIQCMSVTVSIL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         15 PQGENRSKPLG-TPYNFSEHCQDS---VDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQK
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Bukaryota, Metaroa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                        Query Match

24.0%; Score 471; DB 11; Length 381;
Best Local Similarity 32.5%; Pred. No. 6.4e-36;
Matches 122; Conservative 67; Mismatches 148; Indels 31
                                                                                                                                                                   InterPro; IPR001220; LectIn legB.
Prim, PR00017, Tum 1.
PRINTS; PR00237; GPCRHODDEN.
PROSITE; PS00237; G PROTEIN RECEP_F1_1; 1.
PROSITE; PS00262; G PROTEIN RECEP_F1_2; 1.
SEGUENCE 381 AA; 42628 MM; 90787C051347884A CRC64;
                                                                                              MGD; MGI:108418; Npy2r.
GO; GO:0001601; P:peptide YY receptor activity; IDA InterPro; IPR00276; GPCR Rhodpsn.
InterPro; IPR001220; Lectin_legB.
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01-WAR-2001 (TrEMBLrel. 16, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Neuropeptide Y/Peptide YY-Y2 receptor.
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     "Analysis of the mouse transcr:
60,770 full-length cDNAs.";
Nature 420:563-573(2002)
EMBL; AK049892; BAC33975.1; -.
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                                                                                                                                                                                                                                                                 12 PKSPOGENRSKPLGTPYNFSEHCODS----VDVMVFIVTSYSIETVVGVLGNLCLMCVTVR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       248 NHVSPGAASDHYHQRR--HKTT------KMLVCVVVVFAVSWLPLHAFQLAVDI
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                                                                                                                                                                              Length 381;
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                                                                                                                                      381 AA; 42510 MW; 659327904B288BC7 CRC64;
                                                                                                                                                                              Query Match
23.9%; Score 469; DB 11; 1
Best Local Similarity 32.4%; Pred. No. 9.8e-36;
Matches 125; Conservative 63; Mismatches 132;
PEAM, PP00001; 7tm 1; 1.
PRINTS; PR00237; GPCRRHODOPSN.
PROSITE; PS00237; G PROTEIN RECEP F1 1; 1.
PROSITE; PS502862; G PROTEIN RECEP F1 2; 1.
PROSITE; PS00307; LECTIN_LEGUME_BETA, 1.
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Job time : 48 AAPP
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SEQUENCE
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13, Appl
7, Appli
7, Appli
14, Appli
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6, Appli
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Seguence 2, Appli
Seguence 2, Appli
                                                May 11, 2004, 12:50:37; Search time 23 Seconds (without alignments) 841.728 Million cell updates/sec
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Sequence 2, Ar
Sequence 17, A
                                                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                   1 MNTSHLLALLIPKSPQGENR.....TVHTBVSKGSLRLSGRSNPI
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6: /cgn2_6/ptodaca/2/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd
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Maximum Match 100%
Listing first 45 summaries
                                - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
                                                                                  US-09-430-775-2
1965
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Match Length
       Copyright
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Perfect score:
                                  OM protein
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                                                                                                                                             Searched:
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Sequence 362, App
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Sequence 2, Appli
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Sequence 123, Appli
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Sequence 164, Appli
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                                               Sequence 72, A
Sequence 72, A
Sequence 313,
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) Sequence 2, Application US/08176412
) Patent No. 551663

GENERAL INFORMATION:
APPLICANT: Barker, Mary
APPLICANT: Barker, Mary
APPLICANT: Barker, Mary
APPLICANT: Branchek, Therea
APPLICANT: Weinshark, Therea
APPLICANT: Weinshark, Therea
APPLICANT: Weinshark, Therea
APPLICANT: Weinshark, Therea
ITILE OF INVENTION: UNEXPITION TYPEAUTOR TYPEPTIDE
TITLE OF INVENTION: UNEXPITION: YPEPTIDE TYPEPTIDE
TITLE OF INVENTION:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
COUNTRY: US.A.
ZIP: 10112
CONFUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBP C COMPATION
SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Place #10.0, Version #1.25
CURRENT APPLICATION DATA:
PLING SYSTEM: US.A.
SOFTWARE: Place #10.0, P.
FILING ATTON NUMBER: US/08/176,412
FILING ADME:
CLASSIFICATION NUMBER: 28,678
REPERRNCF/DGGET NUMBER: 28,678
REPERRNCF/DGGET NUMBER: 28,678
REPERRNCF/DGGET NUMBER: 28,678
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                                                  linear
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Sequence Sequence Sequence

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Best Local Similarity 100. Matches 375; Conservative
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   181 ENVPHINHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR
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Sequence 2, Application US/0855268A

Patent No. 5958709

GENERAL INFORMATION:
APPLICANT: Walker, Mary
APPLICANT: Walker, Mary
APPLICANT: Wanshank, Richard L.
TITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPEPTIDE
TITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Ocoper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STRIE: New York
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U.S.A.

ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATION SYSTEM: PC-DGS/MS-DGS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/55,268A
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 44743-Z/JPW/MAT
TELEPHONE: (212) 278-0400
TELEPHONE: (212) 278-0400
TELEPHONE: (212) 278-0400
TELEPHONE: (212) 391-0526
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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Length 375

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Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL 180
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                                          Gaps
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Patent No. 5976814
Patent No. 5976814
Patent No. 5976814
Patent No. 5976814
Patent No. 5976814
PapilCANT: Weinshank, Theresa
APPLICANT: Weinshank, Theresa
APPLICANT: Weinshank, Richard L.
ITIE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPERTIDE
ITITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPERTIDE
ITITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPERTIDE
ITITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
ITITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
ITITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
ITITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
ITITLE OF INVENTION: BAYONE
CONFURE: 1185 Avenue of the Americas
STREET: New York
COMPUTER: New York
COMPUTER: READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPUTER: 130 COMPU
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tive 0; Mismatches 0;
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Patent No. 5976814
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TOPOLOGY: linear
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240 300 360

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241 LQRQGRVFHKGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHBAIPICHG 300
                                                                                                                                                                                                                                                                                                                                                                                     301 NLIFLYCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 360
  61 CLMCVTVRQKEKANVTNLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFI 120
                                                121 OCMSVTVSILSLVLVALBRHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL 180
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                                                                                                                                                                                          181 ENVFHKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR
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                                                                                             121 QCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL
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APPLICANT: Bard, Jonathan A.
APPLICANT: Barder, Mary
APPLICANT: Branchek, Theresa
APPLICANT: Walker, Mary
APPLICANT: Weinstank, Richard L.
TITLE OF INVENTION: DNA ENCODING A HUMAN NEUROPEPTIDE
TITLE OF INVENTION: NECEPTOR (Y4) AND USES THEREOF
INTIES NO INVENTION: RECEPTOR (Y4) AND USES THEREOF
INTIES OF SEQUENCES: ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: New York
CITY: New York
CITY: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 44743.A-PCT\JPW\MAT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEPHONE: (212) 391-0525
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 375 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS SOSTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: PTILIOR DATE: PCT/U894/14436 FILING DATE: CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 1965; DB 5; Best Local Similarity 100.0%; Pred. No. 5.2e-144; Matches 375; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCT-US94-14436-2; Sequence 2, Application PC/TUS9414436; GENERAL INFORMATION:
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APPLICANT: Gerald, Christophe P.G.
APPLICANT: Gerald, Christophe P.G.
APPLICANT: Gerald, Christophe P.G.
APPLICANT: Gerald, Christophe P.G.
APPLICANT: Walker, Mary W.
APPLICANT: Halker, Mary W.
APPLICANT: Branchek, Theresa
TITLE OF INVENTION: Methods, and DNA Encoding A Hypothalamic
TITLE OF INVENTION: Atypical Neuropeptide Y/Peptide YY Receptor (YS)
TITLE OF INVENTION: Atypical Neuropeptide Y/Peptide YY Receptor (YS)
TITLE REPERENCE: 1998-11-25
THEREPERENCE: 1998-11-25
EARLIER APPLICATION NUMBER: 08/56,096
EARLIER APPLICATION NUMBER: 08/349,025
EARLIER PILING DATE: 1995-12-01
EARLIER PILING DATE: 1995-12-02
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin Ver. 2.1
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                                                                             Length 375;
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                                                                        Query Match 100.0%; Score 1965; DB 2; Best Local Similarity 100.0%; Pred. No. 5.2e-144; Matches 375; Conservative 0; Mismatches 0;
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Matches 375; Conservative
; MOLECULE TYPE: protein US-08-495-695B-2
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ORGANISM: Homo sapiens
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                                  1 MNTSHILLALLEPKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNL
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1 MNTSHLLALLLPKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNL
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Sequence 2007.
Sequence 2007.
Patent No. 5976814
GENERAL INFORMATION:
APPLICANT: Walker, Mary
APPLICANT: Walker, Mary
APPLICANT: Weinshamk, Richard L.
TITLE OF INVENTION: DAR ENCODING A HUMAN NEUROPEPTIDE
TITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPEPTIDE
TITLE OF INVENTION: Y/PEPTIDE YY/PANCREATIC POLYPEPTIDE
TITLE OF INVENTION: RECREPTOR (Y4) AND USES THEREOF
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSER: Cooper & Dunham
ADDRESSER: Cooper & Dunham
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STATE: New York
CUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.24
CURRENI APPLICATION DATA:
APPLICATION NUMBER: US/08/495,695B
FILING DATE: 13-Jan-1997
CLLSSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 24,743.A.PCT-US/JPW/JHB
TELECOMMUTCATION INFORMATION:
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1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (212) 391-0525
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity
Matches 280; Conservat
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US-08-495-695B-28
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61 CLMCVTVRQKEKANVTNLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFI 120
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APPLICANT: Bard, Jonathan A.
APPLICANT: Walker, Mary
APPLICANT: Walker, Mary
APPLICANT: Weinshank, Theresa
APPLICANT: Weinshank, Richard L.
TITLE OF INVENTION: Y/PEPTIDE YY/PANCRAMIC POLYPETIDE
TITLE OF INVENTION: Y/PEPTIDE YY/PANCRAMIC POLYPETIDE
TITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: COOPER & Dunham
STREET: 1185 Avenue of the Americas
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COUTRY: New York
COMPRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/495,695B
FILING DATE: 13-Jan-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White: John P. B. REGISTRATION NUMBER: 44743-A-PCT-US/JPW/JHB
TELECOMMUNICATION INFORMATION:
TELEPRAK: (212) 278-0400
TELEPRAK: (212) 278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 33, Application US/08495695B
Patent No. 5976814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (212) 391-0525
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361 VSKGSLRLSGRSNPI 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361 VSKGSLRLSGRSNPI 375
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TYPE: amir
TOPOLOGY:
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-08-495-695B-33
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CITY: Ne
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STREET: 1185 Aver
CITY: New York
STATE: New York
COUNTRY: U.S.A.
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                  Best Local Simi
Matches 280;
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                                                                                                                                                                                                                                                                   241 LORORRAFHTHICSSRVGOMKDINGMLMAMVTAFAVLMLDLHVFNTLEDWYQEAIPACHG 300
                                                                                                                                                                                                                                                                                                                                                                                                                   301 NLIFLMCHLFAMASTCVNPFIYGFLNINFKKDIKALVLICRCRPPQGEPEPLFLSTVHTD 360
                                                                                                                                                                  121 QCMSVTVSILSLVLVAALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL 180
                                                                                                                                                                                                                                            181 ENVFHKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR 240
                                                                                                                                                                                                                                                                                                                     LQRQGRVFHKGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHG 300
                                                                                                                                                                                                                                                                                                                                                                                             301 NLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 360
                                        WNTSHLLALLLPKSPQGENRSKPLGTPYNFSEHCQDSVDVWVFIVTSYSIETVVGVLGNL
                                                                                          CLMCVTVRQXEXANVTNLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Bard, Jonathan A.
APPLICANT: Walker, Mary
APPLICANT: Walker, Mary
APPLICANT: Walker, Theresa
APPLICANT: Weinshank, Theresa
APPLICANT: Weinshank, Richard L.
TITLE OF INVENTION: DNA RHOODING A HUMAN NEUROPEPTI
TITLE OF INVENTION: Y/PEPTIDE YY/PANCERATIC POLYPER
TITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
NUMBER OF SEQUENCES: 28
ADDRESSES: COOPER & Dunham
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
ATTORNEY/AGBNT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REPERENCE/DOCKET NUMBER: 44743-A-PCT\JPW\MAT
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
SEQUENCE CAPACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/14436
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SSEE: Cooper & Dunham
F: 1185 Avenue of the Americas
New York
Y: New York
Y: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 28, Application PC/TUS9414436
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               :||||:|: :||
LSKGSMRMGSKSN 373
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TOPOLOGY: linear

MOLECULE TYPE: protein
PCT-US94-14436-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CT-US94-14436-28
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61 CLIFVTTRQKEKSNVTNLLIANLAFSDFLMCLICQPLTVTVTIMDYWIFGEVLCKMLTF1 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 NLIFLMCHLFAMASTCVNPFIYGFLNINFKKDIKALVLTCRCRPPQGEPEPLFLSTVHTD 360
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                                                                                                                                                                                                                                                                                                                                     121 QCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL
                                                                                                                                               1 MNTSHLMASLSPAFLQGKNGTNPLDSLYNLSDGCQDSADLLAFIITTYSVETVLGVLGVL
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                                                        Gaps
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  Length 375
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Patent No. 5976814
GENERAL INFORMATION
APPLICANT: Bard, Jonathan A.
APPLICANT: Walker, Mary
APPLICANT: Walker, Mary
APPLICANT: Weinchank, Richard L.
TITLE OF INVENTION: DNA ENCODING A HUMAN NEUROPEPTIDE
TITLE OF INVENTION: PRECEPTOR (Y4) AND USES THEREOF
TITLE OF INVENTION: YPEPTIOR Y/PANCREATIC POLYPEPTIII
TITLE OF INVENTION: APPERTOR (Y4) AND USES THEREOF
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSER: Cooper & Dunham
STREET: 1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 10036
COMPUTER READALE FORM:
MEDTUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: DEACHLIN Release #1.0, Version #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/495,695B
FILING DATE: 13-Jan-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44743-A-PCT-US/JPW/JHB
75.9%; Score 1492; DB 5; 75.1%; Pred. No. 1.4e-107; ive 34; Mismatches 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGIGSTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 4474:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (212) 391-0525
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 350 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VSKGSLRLSGRSN 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          :||||:|:
LSKGSMRMGSKSN 373
                       Similarity 75.1;
30, Conservative
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STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                             121 OCMSVTVSILSLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSIL 180
                                                                                                                                                                                                                                                                                                                                                                                                               181 ENVFHKANSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 LQRQGRVFHKGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 LQRQRRAFHTHTCSSRVGQMKRINGMLMAMVTAFAVLMLDLHVFNTLEDWYQEAIPACHG 300
                                                                                                                                                                                        1 MNTSHLLALLLPKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 NLIFLMCHLFAMASTCVNPFIYGFLNINFKKDIKALVLTCRCRPPQGBPB 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 NLIFLVCHLLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESE 350
                                                                              71.9%; Score 1412; DB 2; Length 350; 75.7%; Pred. No. 1.9e-101; ive 30; Mismatches 55; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Malker, Mary
APPLICANT: Walker, Mary
APPLICANT: Walker, Mary
APPLICANT: Walnohek, Theresa
APPLICANT: Walnohek, Theresa
APPLICANT: Weinshank, Richard L.
TITLE OF INVENTION: V/PRETIDE YY/PANCREATIC POLYPEPTIDE
TITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
CORRESPONDENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS OSTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: PS.08/55,268A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE DOCKET NUMBER: 44743-Z/JPW/MAT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3: Cooper & Dunham LLP
1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 10
US-08-555-268A-13
; Sequence 13, Application US/08555268A,
Patent No. 5958709
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (212) 391-0526
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                    Best Local Similarity 75.7
Matches 265; Conservative
; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-495-695B-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: New York STATE: New York COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
STREET: 118
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                                                                                   Query Match
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KVVCTESWPLAHHRIIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYS-LR 256
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SETKRINVALLSIVVAPAVCWLPLTIFNTVFDANHQIIATCNHNLFFLLCHLTAMISTC 313
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                                                                                                                                                                                                                                                                                                                                                                                                                           ERHOLIINPIGWKPSISQAYLGIVLIWVIACVLSLPFLANSILENVFHKNHSKALEFLAD 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                317 VNPFIYGFLNTNFKKEIKALVLTCQQSAPLEBSEHLPLSTVHTEVSKGSLRLSGRSNPI 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28 YNFSEH------CQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
                                                                                                                                                         16;
                                                                                                        Length 382;
                                                                                                   Query Match
44.2%; Score 869; DB 2; Length 38:
Best Local Similarity 46.8%; Pred. No. 1.4e-59;
Matches 168; Conservative 74; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/415,818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Mary A. Appollina
P.O. Box 2000, 126 E. Lincoln Ave
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Cascieri, Margaret A. APPLICANT: Cascieri, David L. APPLICANT: Linemeeyer, David L. APPLICANT: Shiao, Lin-Lin APPLICANT: Strader, Catherine D. APPLICANT: Strader, Catherine D. APPLICANT: Weinberg, David H. APPLICANT: Weinberg, David H. TITLE OF INVENTION: NEUROPEPTIDE Y REINTHER OF SECURNCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Appollina, Mary A.
REGISTRATION VMBER: 34,087
REFERENCE/DOCKET NUMBER: 19390
TELECOMUNICATION:
TELEPHONE: 908-594-3462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08/383,746
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Patent No. 5621079
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/36
FILING DATE: 03-FEB-1995
ATTORNEY/AGENT_INFORMATION:
TOPOLOGY: linear MOLECULE TYPE: peptide US-08-555-268A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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LENGTH: 382 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECTLE TYPE: protein
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 46.5%
Matches 167; Conservative
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New York
: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: New York
STATE: New York
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                      , ANTI-SENSE: NO
US-08-894-236-7
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                                                                                                                                                                                                                                                                                                                                                        KVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYS-LR 256
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                                                                                                                                                                                                                                                                                                                                      LLIANLAFSDFLMCLLCOPLTAVYTIMDYWIFGETLCKMSAFIOCMSVTVSILSLVLVAL 137
                                                                                                                                                                                                                                                                                                                                                                                                         ERHOLIINPTGWKPSISQAYLGIVLIWVIACVLSLPFLANSILENVFHKNHSKALEFLAD 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               254 SSETKRINIMLLSIVVAFAVCWLPLTIFNTVFDWNHQIIATCNHNLLFLLCHLTAMISTC 313
                                                                                                                                                                                                                                                                                         317 VNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTEVSKGSLRLSGRSNPI 375
                                                                                                                                                                                                                                                                     28 YNFSEH------CQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
                                                                                                                                                                                                 44.1%; Score 867; DB 1; Length 382;
46.5%; Pred. No. 2e-59;
tive 75; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Felease #1.0, Version #1.30 CURBIN APPLICATION DATA:
APPLICATION NUMBER: US/08/894,236
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Cascieri, Margaret A.
APPLICANT: Linemeyer, David L.
APPLICANT: Linemeyer, David L.
APPLICANT: Shiao, Lin-Lin
APPLICANT: Strader, Catherine D.
APPLICANT: Strader, Catherine D.
APPLICANT: Weinberg, David H.
TITLE OF INVENTION: NEUROPEPTIDE Y RECEPTOR NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Mary A. Appollina
STREET: P.O. Box 2000, 126 E. Lincoln Ave.
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COUNTRY: USA
ZIP. 07065
COMPUTER READABLE FORM:
MEDIUM TYPE: FLORPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/383,746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 7, Application US/08894236 Patent No. 5939263
              INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 382 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                      Best Local Similarica
Matches 167; Conservative
908-594-4720
                                                                                               TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-08-415-818-7
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 TELEFAX:
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US-08-894-236-7
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78 LLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKWSAFIQCMSVTVSILSLVLVAL 137
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  257 AGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLIFLVCHLLAMASTC 316
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28 YNFSEH------CQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        198 KVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYS-LR
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46.5%; Pred. No. 2e-59;
tive 75; Mismatches 101; Indels
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APPLICANT: Walker, Mary
APPLICANT: Walker, Mary
APPLICANT: Welnshark, Theresa
APPLICANT: Welnshark, Richard L.
TITLE OF INVENTION: DAW ENCODING A HUMAN NEUROPEPTIDE
TITLE OF INVENTION: Y/PEPTIDE YY/PANCREAFIC POLYPEPTIDE
TITLE OF INVENTION: RECEPTOR (Y4) AND USES THEREOF
TOWNESS OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1: Cooper & Dunham LLP
1185 Avenue of the Americas
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                                                           08/415,818
PILING DATE: 03-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/415,818
FILING DATE: 03-APR-1995
ATTORNEY/AGENT INFORMATION:
NAME: APPCILITA, MATY A.
REGISTRATION NUMBER: 34,087
REFERENCE/POCKET NUMBER: 1939
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                             TELEPHONE: 908-594-3462
TELEPAX: 908-594-4720
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 382 amino acids
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GENERAL INFORMATION:
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APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
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US-08-415-818-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          78 LLIANLAFSDFLMCLLCQPLTAVYTINDYWIFGETLCYMSAFIQCMSVTVSILSLVLVAL 137
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314 UNPIFYGFLNKUKQRDLQFFFNFCDFRSRDDDXETIAMSTMHTDVSKTSLK---QASPV 369
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                           44.1%; Score 867; DB 2; Length 382;
46.5%; Pred. No. 2e-59;
tive 75; Mismatches 101; Indels
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
RRERET APPLICATION DATA:
APPLICATION NUMBER: US/08/555,268A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Cascieri, Margaret A.
APPLICANT: Linemeyer, David L.
APPLICANT: MacNeil, Douglas J.
APPLICANT: Strader, Catherine D.
APPLICANT: Tan, Carina P.
APPLICANT: Tan, Carina P.
APPLICANT: Weinberg, David H.
TILLE OF INVENTION: NOUROPEPTIDE Y RECEPTOR
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                                         APPLICALLY:
FILING DATE:
CLASSIFICATION: 435
ATTORNEY AGENT INFORMATION:
NAME: White. John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 44743-Z/JPW/WAT
TELEPHONE: (212) 278-0400
TELEPAX: (212) 391-0526
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERICIS:
LENGTH: 382 amino acids
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STREET: P.O. Box 2000, 126 E. Lincoln Ave.
CITY: Rahway
                                                                                                                                                                                                                                                                                    LENGTH: 382 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-555-268A-14
                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 46.59
Matches 167; Conservative
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ZIP: 07065
COMPUTER READABLE FORM:
                                     SOFTWARE:
CURRENT APPL:
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76 ILIVNLSFSDLLVAVMCLPFTFVYTLMDHWVFGSTWCKLNPFVQCVSITVSIFSLVLIAV 135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28 YNFSEH------CQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
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44.1%; Score 867; DB 5; Length 382;
Best Local Similarity 46.5%; Pred. No. 2e-59;
Matches 167; Conservative 75; Mismatches 101; Indels 16; Gaps
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATURE: SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin_Release #1.0, Version #1.30
                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/01444
FILING DATE:
                                                                                                                                                            CLASSIPCATION:
PRIOR APPLICATION:
PRIOR APPLICATION NUMBER: 08/383,746
FILING DATE: 03-FEB-1995
PRIOR APPLICATION NUMBER: 08/415,818
FILING DATE: 03-APR-1995
APPLICATION NUMBER: 34,087
REGISTRATION NUMBER: 34,087
REGISTRATION NUMBER: 34,087
TELECOMMUNICATION INFORMATION:
TELEPHONE: 908-594-3462
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERITICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shiao, Lin-Lin
Strader, Catherine D.
Tan, Carina P.
Weinberg, David H.
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Linemeyer, David L.
MacNeil, Douglas J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : 382 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single
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131 SLVLVALERHQLIINPTGWKPSISQAYLGIVLIWVIACVLSLP-FLANSILENVFHKNHS 189
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    245 RRKENKSRLNENKRVNVMLISIVVTFGACWLPLNIFNVIFDWYHEMLMSCHHDLVFVVCH 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         309 LLAMASTCVNPFIYGFLNTNFKKEIKALVLTCQQSAPLEESEHLPLSTVHTEVSKGSLRL 368
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12 PKSPQGENRSKPLGTPYNFSEHCQDSVDVMVFIVTSYSIETVVGVLGNLCLMCVTV-RQK 70
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  43.2%; Score 863; DB 1; Length 371;
43.2%; Pred. No. 3.9e-59;
tive 89; Mismatches 108; Indels
                                                                                                                                                                                         CZIP: 07085

CZEP: 07085

MEDIUM TYPE: Floppy disk
COMPUTER: EIM PC compatible
COMPUTER: EIM PC compatible
CORREATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/415,818
FILING DATE:
CLASSIFICATION NUMBER: 08/383,746
FILING DATE: 03-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: APPLICATION NUMBER: 34,087
REGISTRATION NUMBER: 34,087
REFERENCE/DOCKET NUMBER: 19390
TELEFROWEY/DOCKET NUMBER: 19390
TELEFROWEY ON SEQ. ID NO: 6: SEQUENCE CHARACTERISTICS:
LENGTH: 371 amino acide
TYPE: Amino acide
TYPE: MULECULE TYPE: protein
TITLE OF INVENTION: NEUROPEPTIDE Y RECEPTOR NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSE: Mary A. Appollina
SURRET: P.O. Box 2000, 126 E. Lincoln Ave.
CITY: Rahway
STATE: NJ
COUNTRY: USA
ZIP: 07065
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Best Local Similarity 43.2%
Matches 156; Conservative
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Search completed: May 11, 2004, 12:58:03 Job time: 24 secs

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May 11, 2004, 12:55:33 ; Search time 48 Seconds (without alignments) 2168.490 Million cell updates/sec
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1 MNTSHLLALLLPKSPQGENR.....TVHTEVSKGSLRLSGRSNPI 375
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2: /cgn2_6/ptodata/2/pubpaa/USO7_NEW PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/USO6_NEW PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/USO7_NEW PUB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/USO7_NEW PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/USO7_NEW PUB.pep:*

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8: /cgn2_6/ptodata/2/pubpaa/USO8_NEW PUB.pep:*

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10: /cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*

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17: /cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*

18: /cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*

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Listing first 45 summaries
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

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	Description	Sequence	Sequence 12,	Sequenc	Sequence 47	Sequenc	Sequence 51, 7	Seguenc	Seguence	Seguenc	Sequenc	Sequence	Sequence	Sequenc	Seguenc	CT OF THE PARTY OF
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	% Query Match	100.0	100.0	100.0	77.3	76.0	48.9	46.9	44.2	44.1	43.9	43.8	43.6	43.6	43.6	,
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43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.1	43.1	42.9	30.7	29.2	29.5	28.6	28.5	28.3	28.3	28.3	28.3	27.4	26.9	26.6	26.4	26.3	26.2	25.8	25.3	24.7
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ALIGNMENTS

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Sequence 17, Application US/09962646

| Sequence 17, Application US/09962646
| Patent No. US20020103123A1
| GENERAL INFORMATION:
| APPLICANT: GERALD, CHRISTOPHE P.G. |
| APPLICANT: WALKER, MARY WARE PERFORMENT OF PARTIES OF THERESA |
| APPLICANT: BRANCHER, THERESA |
| APPLICANT: BRANCHER, THERESA |
| TITLE OF INVENTION: WODIFYING FEEDING BEHAVIOR, COMPOUNDS USEFUL IN SUCH METHODS, AND TITLE OF INVENTION: ENCODING A HYPOTHALAMIC ATYPICAL NEUROPEPTIDE Y/PEPTIDE YY RECEPTION INVERSE: 0950466
| TITLE OF INVENTION NUMBER: 08/09666,096 |
| PRIOR PILING DATE: 1998-11-26 |
| PRIOR PAPLICATION NUMBER: 08/566,096 |
| PRIOR PAPLICATION NUMBER: 08/566,096 |
| PRIOR PAPLICATION NUMBER: 08/349,025 |
| PRIOR PILING DATE: 1994-12-01 |
| NUMBER OF SEQ ID NOS: 17 |
| SOFTWARE: Patentin version 3.1 |
| SEQ ID NO 17 |
| LENGTH: 375 |
| LENGTH: 375 |
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Best Local Similarity 100.0%; Score 1965; DB 9; Length 375;
Best Local Similarity 100.0%; Pred. No. 5.8e-170;
Matches 375; Conservative 0; Mismatches 0; Indels 0
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ORGANISM: Homo Sapiens
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us-09-430-775-2.rapb

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0; Mismatches
                                                                                                                      Sequence 203, Application US/10225567A Publication No. US20030113798A1 GENERAL INFORMATION:
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                                     VSKGSLRLSGRSNPI 375
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               361 VSKGSLRLSGRSNPI
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Matches 375; Conserv
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US-10-081-810-47
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APPLICANT: Amling, Michael
APPLICANT: Amling, Michael
APPLICANT: Amling, Michael
APPLICANT: Amling, Michael
APPLICANT: Day, Particle
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CONTROL OF BONE FORMATION VIA
TITLE OF INVENTION: MODULATION OF NEUROPEPTIDE Y ACTIVITY
TITLE OF INVENTION: MOMBER: US/10/181,906
CURRENT FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: PCT/US01/02040
PRIOR PLING DATE: 2001-01-22
NUMBER OF SEQ ID NOS: 16
SEQ ID NO 12
LENGTH: 375
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                                                                                                                                                                              180
                                                                                                                         181 ENVFHKONISKALEFLADKVVCTESWPLANHRTIYTTFLLLFQYCLPLGFILVCYARIYRR 240
                                                                                                                                                                                                                      NLIFLVCHLLAMASTCVNPFIYGFLNTNPKKEIKALVLTCQQSAPLEESEHLPLSTVHTE 360
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CLMCVTVRQKEKANVTNLLIANLAFSDFLMCLLCQPLTAVYTIMDYWIFGETLCKMSAFI 120
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                                                 ENVFHIONHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR
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                                                                                                                                                                                                                                                                                                                                                                                              Sequence 12, Application US/10181906
Publication No. US20040053864A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                             VSKGSLRLSGRSNPI 375
                                                                                                                                                                                                                                                                                       VSKGSLRLSGRSNPI 375
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US-10-181-906-12
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Sequence 47, Application US/10081810
Publication No. US20030064438A1
GENERAL INFORMATION:
GENERAL THORMATION:
TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTOR NUCLEIC ACIDS, POLYPEPTIDES, ANTIBODIES
TITLE OF INVENTION: USES THEREOF
FILE REPERBNEE: 1013.2
CURRENT APPLICATION NUMBER: US/10/081,810
CURRENT PILING DATE: 2002-02-22
APPLICANT: LifeSpan Biosciences
APPLICANT: Brown, JoSeph P.
APPLICANT: Brown, JoSeph P.
APPLICANT: Brown, JoSeph P.
APPLICANT: Brown, JoSeph P.
APPLICANT: Brown, JOSEPH P.
APPLICANT: Rough, Christine L.
TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS
FILE REFERENCE: 1920-4-4
CURRENT PELING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: 60/257,144
PRIOR FILING DATE: 2000-12-19
NUMBER OF SEQ ID NOS: 2292
SOFTWARE: Patentin version 3.1
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RESULT 6

US-10-081-810-51

SQUENCE 51, Application US/10081810

SAQUENCE 51, Application US/10081810

SUBJICATION NO. US20030064438A1

GARREAL INFORMATION:

APPLICANT Bristol-Myers Squibb Company

TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTOR NUCLEIC ACIDS, POLYPEPTIDES, ANTIBODIES

TITLE OF INVENTION: USES THEREOF

FILE REFERENCE: D0132 NP

CURRENT APPLICATION NUMBER: US/10/081,810

CURRENT FILING DATE: 2002-02-22

PRIOR FILING DATE: 2001-02-23

PRIOR FILING DATE: 2001-02-23

PRIOR PLICATION NUMBER: US 60/270,792

PRIOR PLICATION NUMBER: US 60/270,792

PRIOR PLICATION NUMBER: US 60/296,427

PRIOR PLICATION NUMBER: US 60/296,427

NUMBER OF SEQ ID NOS: 58

SOFTWARE: Patentin version 3.0

SECOLUMBER OF SECOLUM OF SECOLUMBER: US 60/296,427
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48.9%; Score 960; DB 12; Length 37;
Best Local Similarity 50.1%; Pred. No. 1e-78;
Matches 188; Conservative 57; Mismatches 112; Indels
   Best Local Similarity 75.1%; Pred. No. 3.3e-127;
Matches 280; Conservative 35; Mismatches 58;
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361 LSKGSMRMGSKSN 373
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ORGANISM: Danio rerio
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TITLE OF INVENTION: G-RROTEIN COUPLED RECEPTOR NUCLEIC ACIDS, POLYPEPTIDES, ANTIBODIE
TITLE OF INVENTION: USES THEREOF
FILE REPERENCE: DO132 NP
CURRENT APPLICATION NUMBER: US/10/081,810
CURRENT APPLICATION NUMBER: US 60/270,793
PRIOR FILING DATE: 2001-02-23
PRIOR FILING DATE: 2001-02-23
PRIOR FILING DATE: 2001-02-23
PRIOR FILING DATE: 2001-02-23
PRIOR FILING DATE: 2001-06-06
NUMBER OF SEQ ID NOS: 58
SOFTWARE: Patentin version 3.0
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77.3%; Score 1519; DB 12,
Best Local Similarity 75.9%; Pred. No. 1.8e-129;
Matches 283; Conservative 35; Mismatches 55;
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PRIOR APPLICATION NUMBER: US 60/270,793
PRIOR FILING DATE: 2001-02-23
PRIOR FILING DATE: 2001-02-39
PRIOR APPLICATION NUMBER: US 60/270,792
PRIOR PILING DATE: 2001-02-39
PRIOR PILING DATE: 2001-06-06
PRIOR PILING DATE: 2001-06-06
PRIOR PILING DATE: 2001-06-06
PRIOR PILING DATE: 2001-06-06
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LENGTH: 375
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; LENGTH: 374
; TYPE: PRT
; ORGANISM: Gadus morhua
US-10-072-012-359
                                                                                                                                                     Query Match
Best Local Similarity
Matches 178; Conserv
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         181 ENVEHKNHSKALEFLADKVVCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRR 240
                                                                                                                                                              299 HGNLIFLVCHILAMASTCVNPFIYGFLNTNFKKBIKALVLTCQQSAPLEESEHLPLSTVH 358
                                                                                                                                                                                                                                                                                                285 QHDAİFSACHLIAMASICVNPVIYGFLNNNFQKELKSLLSRCRCWGPAESYESFPLSTVS 344
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APPLICANT: Furtak, Katarzun

APPLICANT: Grosse, William M.
APPLICANT: Grosse, William M.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Catherine E.
TITLE OF INVENTION: VINNER: 60/265,102
PRIOR PELING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR PILING DATE: 2001-01-32
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR PELING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR PELING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-01-31
PRIOR PELING DATE: 2001-02-02
PRIOR PELING DATE: 2001-02-02
PRIOR PELING DATE: 2001-02-02
PRIOR PELING DATE: 2001-02-02
PRIOR PELING DATE: 2001-02-02
PRIOR PELING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PELING DATE: 2001-02-07
PRIOR PELING DATE: 2001-02-07
PRIOR PELING DATE: 2001-02-07
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PRIOR PELING DATE: 2001-02-07
PRIOR PELING DATE: 200
                                                              165 TNSPFHNLSLPFNPFSDHFICIEQWPSEGNRLTYTTLLLCQYCLPLALILVCYFRIFLR
                                                                                                                            241 LOROGRVFH -- KGTYSLRAGHMKOVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPIC
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5. US20040033493A1
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Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr. Raymond J.
Gusev, Vladimir Y.
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Zerhusen, Bryan
Patturajan, Meera
Shimkets, Richard
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Wolenc, Adam R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Tchernev, Velizar
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206 RLAYITSLLVFQYFLPLGLIAACYLSIFLRLRRRKDMVBRARDSSRDNRAKGSRRINVML 265
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                                                                                                                                                      28 EBCPSSKSGTTFLILVYSTMIAVGIVGNSCLVFVIARQKEMHNVTNIFIANLSCSDILMC 87
                                                                                                                                                                                                                                                                 88 IFCLEVTLIYTLMDRWILGEALCKLTPFVQCISVTVSIFSLVLIAMERYQLIHPTGWKP
                                                                                                                                                                                                                                                                                                                                                                                  148 MVGQSYMAVGIIWVVACLISVPFLSFTVLDNLPLQNLS--LPFPGQDHWLCTESWPTNSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32 EHCODSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQXEKANVTNLLIANLAFSDFLMC
                                                                                                                                                                                                                                                                                                                                                152 SISQAYLGIVLIWVIACVLSLPFLANSILENVFHKNHSKALEFLA-DKVVCTESWPLAHH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                268 VVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLIFLVCHLLAMASICVNPFIYGFLNT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  211 RTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGRVFHKGTYSLRAGHMK----QVNVVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28 YNFSEH-----CODSVDVMVFIVTSYSIETVVGVLGNLCLMCVTVRQKEKANVTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   328 NFKKEIKALVLTCQQSAPLEESEHLPLSTVHTEV----SKGSLRL 368
   Length 374;
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44.2%; Score 869; DB 9; Length 38.

Best Local Similarity 46.8%; Pred. No. 1.9e-70;

Matches 168; Conservative 74; Mismatches 101; Indels
                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09771956
; Patent No. US20010031474A1
; GENERAL INFORMATION:
; APPLICANT: Bennett, Michele
; APPLICANT: Brodbeck, Robbin
APPLICANT: Brodbeck, Robbin
; TITLE OF INVENTION: Chimeric Neuropeptide Y Receptors
; TITLE OF INVENTION: Chimeric Neuropeptide Y CURRENT APPLICATION WINGHER: US/09/771,956
; CURRENT FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 31
; SEQ ID NO 3
46.9%; Score 922; DB 12;
ilarity 51.3%; Pred. No. 2.8e-75;
Conservative 62; Mismatches 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Rattus norvegicus
US-09-771-956-3
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US-09-962-646-15
Sequence 15, Application US/09962646
Sequence 15, Application US/09962646
Sequence 15, Application US/09962646
Sequence 15, Application Grant Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compou
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
APPLICANT: Gregoire, Francine M.
APPLICANT: Johnson, Jeffrey D.
APPLICANT: Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, Johnson, 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66 BAQNVINILIANLSLSDILVCVMCIPFTVIYTLMDHWVFGNTMCKLISYVQSVSVSIF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      131 SLVLVALERHOLIINPTGWKPSISQAYLGIVLIWVIACVLSLP-FLANSILENVFHKNHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       190 KALEFLADKWCTESWPLAHHRTIYTTFLLLFQYCLPLGFILVCYARIYRRLQRQGR-VF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            249 HKGTYSLRAGHMKQVNVVLVVMVVAFAVLWLPLHVFNSLEDWHHEAIPICHGNLIFLVCH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: mouse pancreatic polypeptide receptor type 2 (PP2) US-10-328-916-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
80
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
43.9%; Score 863; DB 15; 1
Best Local Similarity 43.2%; Pred. No. 6.3e-70;
Matches 156; Conservative 89; Mismatches 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  369 S 369
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CURRENT APPLICATION NUMBER: US 60/270,793

PRIOR APPLICATION NUMBER: US 60/270,792

PRIOR FILING DATE: 2001-02-23

PRIOR FILING DATE: 2001-02-23

PRIOR FILING DATE: 2001-02-23

PRIOR PRIOR FILING DATE: 2001-02-83

PRIOR PRIUM DATE: 2001-02-83

PRIOR PRIUM DATE: 2001-05-06

NUMBER OF SEQ ID NOS: 58

SOFTWARE: PATENTIN VERSION 3.0

LENGTH: 383
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44.1%; Score 867.5; DB 12; Length 383;
Best Local Similarity 45.4%; Pred. No. 2.6e-70;
Matches 169; Conservative 76; Mismatches 106; Indels 21; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 50, Application US/10081810; Publication No. US20030064438A1; GENERAL INFORMATION:
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Publication No. US20040002114A1
GENERAL INFORMATION:
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362 TSLK---QASPL 370
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) CRGANISM: Cavia porcellus

US-10-081-810-50
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                                           64 ILLKQKERRNVTNILIVNLSFSDLLVAIMCELPFTFVYTLMDHWVFGEAMCKLNDFVQCVS
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43.6%; Score 856.5; DB 10; Length 384;
Best Local Similarity 44.6%; Pred. No. 2.6e-69;
Matches 166; Conservative 77; Mismatches 108; Indels 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
US-09-393-696-23
Sequence 23, Application US/09393696
Sequence 23, Application US/09393696
Publication No. US20030022277A1
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc. et al.
ITILE OF INVENTION: Human Neuropeptide Receptor
FILE REFERENCE: PP168P2
CURRENT APPLICATION NUMBER: US/09/393,696
CURRENT FILING DATE: 1999-09-10
RARLIER APPLICATION NUMBER: PCT/US95/05616
EARLIER PILING DATE: 1995-06-05
EARLIER PILING DATE: 1995-06-05
SARLIER PILING DATE: 1995-06-05
SARLIER PILING DATE: 1995-06-05
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 23
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362 TSLK---QASPV 370
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CORGANISM: Homo sapiens
US-09-393-696-23
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IllkQxEMRNVTNILIVNLSFSDLLVAIMCLPFTFVYTLMDHWVFGEAMCKLNPFVQCVS 123
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44.6%; Pred. No. 2.6e-69;
tive 77; Mismatches 108; Indels 21
                                                                                                                                                                                   ch 43.8%; Score 860.5; DB 9; Length 1. Similarity 44.9%; Pred. No. 1.1e-69; L67; Conservative 77; Mismatches 107; Indels
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Patent No. US20010031474A1
GENERAL INFORMATION:
APPLICANT: Brodbeck, Mochele
APPLICANT: Krause, James
ITLE OF INVENTION: Chimeric Neuropeptide Y Receptors
FILE REFERENCE: N2000.001
CURRENT APPLICATION NUMBER: US/09/771,956
CURRENT PALING DATE: 2001-01-29
NUMBER: PATENTION S.
SOFTWARE: PATENTION S.
1. SOFTWARE: PATENTIN Ver. 2.1
SOFTWARE: PATENTIN Ver. 2.1
SOFTWARE: PATENTIN Ver. 2.1
; PRIOR FILING DATE: 1994-12-01; NUMBER OF SEQ ID NOS: 17; SOFTWARE: Patentin version 3.1; SEQ ID NO 15; IENGTH: 384; TVPE: PRT CRGANISM: Homo Sapiens US-09-962-646-15
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362 TSLK---QASPV 370
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Best Local Simi.
Matches 166;
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Best Local S
Matches 167
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Best Local Similarity 44.6%; Pred. No. 2.6e-69;
Matches 166; Conservative 77; Mismatches 108; Indels 21; Gaps
                                                                                                     APPLICANT: Bakthavatchalam, Rajagopal
APPLICANT: Bakthavatchalam, Rajagopal
APPLICANT: Blum, Charles A.
APPLICANT: Blum, Charles A.
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APPLICANT: Blum, Charles A.
APPLICANT: Darrow, James W.
APPLICANT: De Lombaert, Stephane W.
APPLICANT: Tran, Jennifer W.
APPLICANT: Tran, Jennifer W.
APPLICANT: Anachang W.
APPLICANT: Alliott, Richard L.
APPLICANT: Blliott, Richard L.
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APPLICAN
Sequence 4, Application US/10410648
Publication No. US20040072847A1
GENERAL INFORMATION:
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TSLK---QASPV 370
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ORGANISM: homo sapiens
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RESULT 15 US-10-013-846-4 Sequence 4, Application US/10013846 Publication No. US20030036652A1

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64 ILLKQXGMRNVTNILIVNLSFSDLVAIMCLPFTFVYTLMDHWVFGBAMCKLNPFVQCVS 123
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Bakthavatchalam, Rajagopal
Blum, Charles A
Brielmann, Harry L
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Best Local Similarity 44.6%
Matches 166; Conservative
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362 TSLK---QASPV 370
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